THE INFORMATION IN THIS BOX IS NOT A PART OF THE CONTRACT AND IS FOR COUNTY USE ONLY

SAN BERNARDINO COUNTY

Contract Number

21-648 A1

SAP Number

Innovation and Technology Department

Department Contract Representative	**Jennifer Mancebo**
Telephone Number	909-388-5579
Contractor	SUSE LLC
Contractor Representative	Janet Kabeary
Telephone Number	385-666-5676
Contract Term	10/1/21 – 9/30/23
Original Contract Amount	Non-financial
Amendment Amount	Non-financial
Total Contract Amount	Non-financial
Cost Center	1200604048

IT IS HEREBY AGREED AS FOLLOWS:

AMENDMENT NO. 1

This Amendment No. 1 ("Amendment") dated September 13, 2022 is made by and between SUSE LLC ("SUSE"), and the San Bernardino County ("Customer") and modifies the terms to agreement executed between the parties as of September 14, 2021 ("Contract").

1. All references to "County of San Bernardino" in the Addendum are amended to read "San Bernardino County".
2. Delete Paragraph 2, Term and replace with the following:

   2. **Term**. The Term of this Addendum shall commence on October 1, 2021 and continue through September 30, 2023, thereafter expiring unless extended by mutual written amendment executed by authorized representatives of both parties.

3. Delete "Terms and Conditions for SUSE Subscription Offerings", July 2021 and replace with the attached, "Subscription Terms and Conditions for SUSE Subscription Offerings", June 2022, as attached hereto.
4. **Full Force and Effect.** The Contract, as amended by this Amendment, remains in full force and effect.

5. **Capitalized Terms.** Any capitalized term used but not defined in this Amendment shall have the meaning given to it in the Contract or the Addendum, as applicable.

6. **Counterparts.** This Amendment may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, and such counterparts shall together constitute one and the same Contract. The parties shall be entitled to sign and transmit an electronic signature of this Amendment (whether by facsimile, PDF or other email transmission), which signature shall be binding on the party whose name is contained therein. Each party providing an electronic signature agrees to promptly execute and deliver to the other party an original signed Amendment upon request.

SAN BERNARDINO COUNTY

► _____

Curt Hagman, Chairman, Board of Supervisors

Dated: SEP 13 2022

SIGNED AND CERTIFIED THAT A COPY OF THIS DOCUMENT HAS BEEN DELIVERED TO THE CHAIRMAN OF THE BOARD

Lynna Monell
Clerk of the Board of Supervisors
San Bernardino County

By _____ Deputy

SUSE LLC

(Print or type name of corporation, company, contractor, etc.)

By ► Jeri White
3D45282B04B6499...

(Authorized signature - sign in blue ink)

Name Jeri White

(Print or type name of person signing contract)

Title Director

(Print or Type)

Dated: July 28, 2022

Address 1800 South Novell Place

Provo, UT 84606

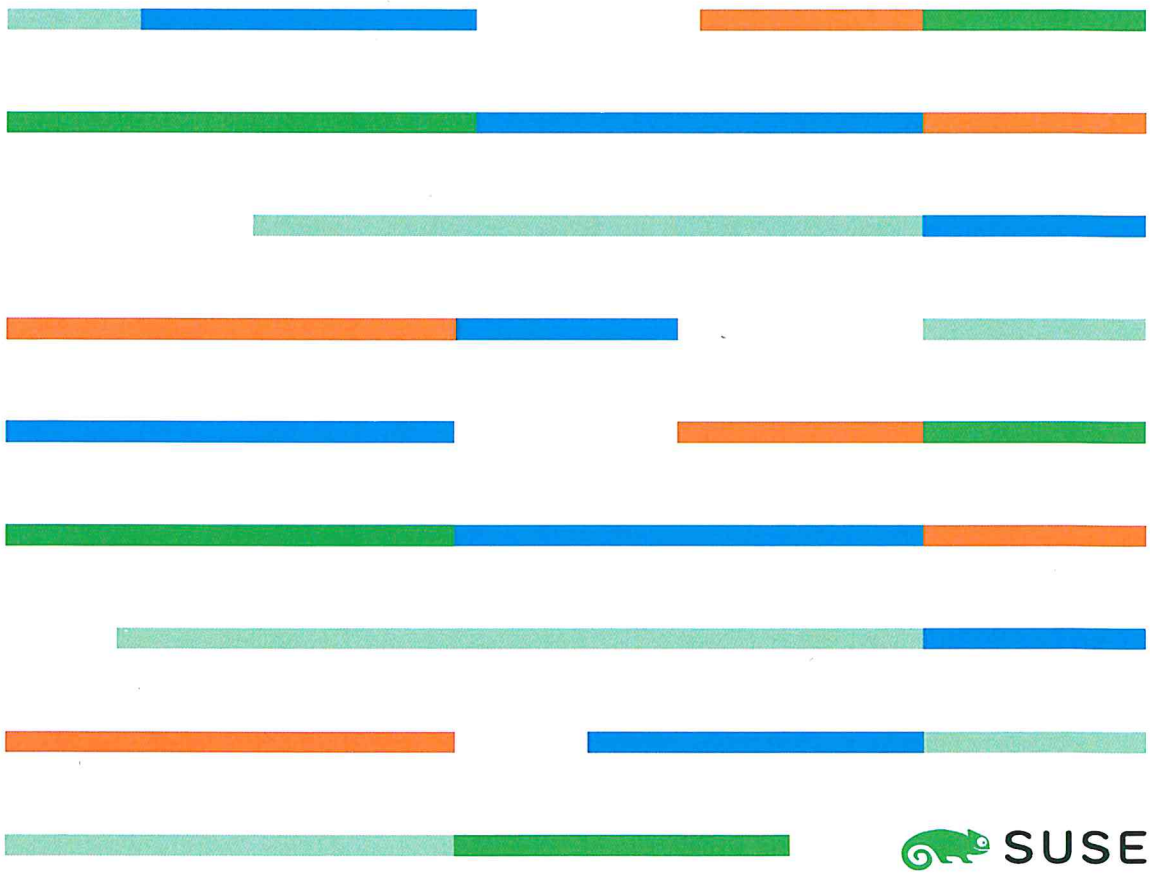
FOR COUNTY USE ONLY

Approved as to Legal Form	Reviewed for Contract Compliance	Reviewed/Approved by Department
► Bonnie Uphold Deputy County Counsel	►	►
Date	Date	Date

June 2022

Subscription Terms and Conditions

for SUSE Subscription Offerings



SUSE

1. **Acceptance.** By accessing the benefits of a Subscription Offering or by clicking the relevant checkbox (or similar action) while accessing SUSE Customer Center, you ("**You**") accept this agreement ("**Agreement**") with the SUSE entity corresponding to your location as listed in Section 10 "**Contracting Entity**" hereto ("**SUSE**"). IF YOU ARE ACCEPTING THIS AGREEMENT ON BEHALF OF A COMPANY, YOU REPRESENT AND WARRANT THAT YOU HAVE THE LEGAL AUTHORITY TO BIND THE COMPANY TO THIS AGREEMENT, AND THAT YOU HAVE READ AND UNDERSTOOD THIS AGREEMENT. IF YOU DO NOT HAVE SUCH AUTHORITY, OR IF YOU OR THE COMPANY DOES NOT AGREE WITH THE TERMS OF THIS AGREEMENT, YOU SHOULD NOT ACCEPT IT. If you are accepting this Agreement on behalf of your company, then the terms "**You**" and **"Your**" refer to your company whenever used below. If You have previously accepted a different version of this agreement, this Agreement supersedes that agreement.

2. **Authority.** You represent that You are the licensee and have rightfully acquired licenses for all software covered by each Subscription Offering. If You are not using the SUSE Product or Subscription Offering as an end user and You have a separately executed agreement with SUSE (e.g., You are an OEM, VAR, etc.), the terms and conditions herein shall not apply to You.

3. **Structure.** This Agreement incorporates the following components: (a) the Master License Agreement **("MLA")**, or if you have not entered into an MLA with SUSE, the Volume Licensing Agreement ("**VLA**"); and (b) the EULA. To the extent of any conflict or ambiguity between the terms and conditions of the MLA (or VLA), the EULA, and this Agreement, the documents shall apply in the following order of precedence: (i) the MLA (or VLA), (ii) this Agreement, and (iii) the EULA.

4. **Subscription Offering Types.**

4.1. SUSE offers a number of different Support Subscriptions. A description of the different types of Subscription Offerings is available at https://www.suse.com/support/programs/subscriptions/; Support Offerings: Developer Services Options | SUSE, and SUSE Premium IT Support Services | SUSE.

4.2. **Evaluation Offerings.** SUSE may offer limited Subscription Offerings for evaluation purposes ("**Evaluation Offering**"). These Subscription Offerings are time limited for sixty (60) days unless otherwise agreed to between You and SUSE. You agree not to use such Subscription Offerings in any production environment or for commercial use.

4.3. **Academic Offerings.** SUSE may offer discounted pricing for Academic Use of its Subscription Offerings ("**Academic Offering**"). You agree to use such Subscription Offerings solely for Academic Use as defined in this Agreement. For the avoidance of doubt, SUSE unconditionally reserves the right to determine whether a specific use constitutes Academic Use.

4.4. **Developer Offerings.** SUSE may offer limited Subscription Offerings for personal development purposes ("**Developer Offering**"). These Subscription Offerings are time limited for one (1) year unless otherwise agreed between You and SUSE. You agree to use such Subscription Offerings only for personal use and not in any production environment or for commercial use.

5. **Subscription Offering.**

5.1. **Benefit of SUSE Subscription Offerings.** For each Subscription Offering You are entitled to receive the materials and services, including technical support services as applicable, identified in this Agreement and on the below URLs.

a) **SUSE Support.** Each Subscription Offering entitles you to web and telephone support set forth at https://www.suse.com/support/ and https://www.suse.com/support/handbook/. The level of technical support services to which You are entitled is determined at the time of purchase. In order to receive technical support for a SUSE Product, all of Your installations for that SUSE Product must be covered by a Subscription Offering.

b) **Product Support Lifecycle and Application of Current Software.** SUSE's product support lifecycle provides Support Availability Guidelines for SUSE Offerings as described at https://www.suse.com/support/policy.html. Subscription Offering benefits may be conditioned on You having applied the most current maintenance software available; for example, once a new Service Pack becomes available, support may be conditioned on You having applied that Service Pack. Similarly, support for Modules may be conditioned on You having updated to the most recent Module version made available by SUSE.

c) **Software Updates and Upgrades.** If SUSE commercially releases any Upgrades and/or Updates during the period covered by Your Subscription Offering, SUSE will make such Upgrades and/or Updates available to You within a reasonable period of time after they become commercially available. To obtain Upgrades and Updates, You will need to subscribe, at no extra cost, to SUSE's Upgrade notification service. You will be entitled (and may be required by SUSE) to install and use such Upgrades and/or Updates up to the number of installations for which You have purchased a Subscription Offering. Use of Upgrades is subject to the restrictions of the EULA provided with the Upgrade.

d) **Premium Support Services.** SUSE offers Your optional purchase of Premium Support Services are defined in the Services Guide as published on https://www.suse.com/media/guide/suse_volume_license_agreement_services_guide.pdf, the terms of which are incorporated into this Agreement, which details the levels of services purchased.

5.2. **Unit of Measure.** In general, unless specified otherwise in the EULA for the applicable SUSE Product or other written agreement between the parties, the unit of measure for a Subscription Offering is the metric specified in Exhibit A ("Unit").

5.3. **Internal Use Only and Coverage Requirement.** Each Subscription Offering acquired by You is solely for Your internal use and direct benefit. When You acquire a Subscription Offering for a SUSE Product, You must acquire sufficient Subscription Offerings in the applicable Units to cover all acquired, installed, or deployed SUSE Products (including variants or components thereof). This requirement is referred to as SUSE's "**Coverage Model**". By way of example, if the Unit is per device on which

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the SUSE Product is installed, then You must acquire a Subscription Offering for each such device. Upon renewal, your payment of Subscription Offering fees will be deemed a representation of the number of installations deployed for the SUSE Products. If You use an Evaluation Offering, Academic Offering and/or a Developer Offering in a production environment or for commercial use, You agree to pay for the Subscription Offerings in consistence with the Coverage.

5.4. **No Mixing of Subscription Offerings.** Subscription Offerings may only be applied to the exact SUSE Product for which the Subscription Offering was acquired. By way of example and not limitation, You cannot apply Subscription Offering benefits for the x86 platform version of SUSE® Linux Enterprise Server (SLES) to the z System platform version of SLES, nor may you apply Subscription Offerings benefits for SLES to SLES for SAP Applications. You may not mix 1-2 Virtual Machine Subscription Offerings with Unlimited Virtual Machine Subscription Offerings on the same Physical Server. All Subscription Offerings must be of the same type on a Physical Server.

6. Bring Your Own Subscription ("BYOS").

6.1. **Transferring or deploying Subscription Offerings to a Public Cloud.** You may transfer or deploy Current Subscription Offerings to an Eligible Public Cloud provided that You first notify SUSE that You intend to transfer or deploy by emailing byos@suse.com.

6.2. **Reporting.** You consent to the Public Cloud vendor reporting your usage of SUSE Products and corresponding Subscription Offerings in vendor's Public Cloud to SUSE.

6.3. **Removal of Public Cloud Vendor from Eligibility.** SUSE may remove a particular Public Cloud vendor with sixty (60) days notice. You may continue to use such Subscription Offerings that have already been validly transferred to that Public Cloud vendor under Section 7.1 hereto during this sixty day notice period or for the remainder of the term of the Subscription Offering, whichever is shorter. You may also transfer Your Subscription Offering to another eligible Public Cloud vendor or (back) to your premises.

7. Volume License Agreement Program.

7.1. This section applies to You if You purchased SUSE Products through the Volume License Agreement Program ("VLA Program"). If you have purchased SUSE Products through the VLA Program, the terms of the VLA available at https://www.suse.com/licensing/vla_documents/, are expressly incorporated into this Agreement and, with the exception of Sections 9 and 11 of this Agreement, a reference to "this Agreement" in the VLA shall include this Agreement and the software and/or services provided pursuant to it. The VLA Program Guide is available at https://www.suse.com/media/guide/volume_license_agreement_program_guide_suse.pdf and also forms an integral part of this Agreement. To the extent of any conflict between the terms of this Agreement and the VLA Program Guide, the terms of this Agreement will prevail. Any changes will apply only to purchases made after the effective date of the changes. If any material change to the VLA Program Guide has an adverse effect on Your participation in it, You will be entitled to terminate Your Agreement by giving written notice to SUSE within 30 days after such material change.

7.2. The price You pay for Your SUSE Product Subscription Offerings and support services will be the price you negotiate with SUSE or SUSE's Authorized Business Partner. You must place an order for the appropriate number of new SUSE Product Subscription Offering installations used or deployed within 30 days after first use of the installation. You must place an order for the appropriate renewal SUSE Product Subscription Offerings (or cancel) at least 30 days prior to the expiration date of Your then-current Subscription Offering ("Order Due Date"). Orders submitted after the Order Due Date will incur a late order fee equal to a maximum of 20% of the renewal SUSE Product Subscription Offering fee due. The late order fee is in addition to annual SUSE Product Subscription Offering fees, late payment interest, and other obligations that may be due and payable. EXPIRING SUSE PRODUCT SUBSCRIPTIONS AND SOFTWARE MAINTENANCE ARE AUTOMATICALLY RENEWED FOR AN ADDITIONAL 12 MONTHS AT THE THEN-CURRENT RENEWAL CHARGES UNLESS, AT LEAST 30 DAYS PRIOR TO THE SUBSCRIPTION OR MAINTENANCE EXPIRATION DATE, SUSE RECEIVES, EITHER DIRECTLY FROM YOU OR THROUGH YOUR RESELLER, YOUR WRITTEN NOTIFICATION THAT YOU DO NOT WANT TO RENEW. YOU AGREE TO PAY SUCH RENEWAL CHARGES. YOU FURTHER AGREE THAT YOUR RESELLER OR SUSE MAY INVOICE YOU WITHOUT A PURCHASE ORDER FOR FEES OTHERWISE OWING UNDER THIS AGREEMENT.

8. Reporting.

You acknowledge that the completeness and accuracy of the information You provide to SUSE may affect SUSE's ability to provide Subscription Offering benefits. Any unauthorized use of Subscription Offering will be treated as a material breach of this Agreement. SUSE has the right to verify Your compliance with this Agreement. You agree to: (1) Implement internal safeguards to prevent any unauthorized copying, distribution, installation, use of, or access to, the SUSE Products including materials provided under this Agreement; (2) Keep records sufficient to certify Your compliance with this Agreement, and, upon request of SUSE, provide and certify metrics and/or reports based upon such records and account for both numbers of copies (by product and version) and network architectures as they may reasonably relate to Your use, licensing and deployment of the SUSE Product, Subscription Offerings and Units; and (3) Allow a SUSE representative or an independent auditor ("**Auditor**") to inspect and audit Your, or Your contractor's, computers and records during Your normal business hours for compliance with the terms of this Agreement. Upon SUSE's and the Auditor's presentation of their signed, written confidentiality statement form to safeguard Your confidential information, You shall fully cooperate with such audit and provide any necessary assistance and access to records and computers. If an audit reveals that Your Subscription Offering purchases have at any time been insufficient to cover each installation, use of, deployment of, or access to the Software, You will, within 30 days, purchase sufficient Subscription Offerings to cover any shortfall, at the then-current full list price, without benefit of any otherwise applicable discount and in respect of a period reflecting the duration of the shortfall. If a shortfall of 5% or more is found, You must reimburse SUSE for the costs incurred in the audit.

9. Limitation of Liability and Indemnity

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9.1. SUBJECT TO SECTION 9.3, NEITHER PARTY, NOR ITS AFFILIATES, WILL BE LIABLE FOR (A) LOSS OF REVENUES, LOSS OF (OR DIMINUTION IN) PROFITS, LOSS OF GOODWILL OR LOSS OR CORRUPTION OF DATA, IN EACH CASE WHETHER DIRECT OR INDIRECT; OR (B) ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL EXEMPLARY OR PUNITIVE DAMAGES OF ANY KIND, IN EACH CASE, WHETHER ARISING UNDER ANY LEGAL OR EQUITABLE THEORY OR ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT, ALL OF WHICH ARE HEREBY EXCLUDED BY AGREEMENT OF THE PARTIES REGARDLESS OF WHETHER OR NOT ANY PARTY TO THIS AGREEMENT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

9.2. SUBJECT TO SECTION 9.3, SUSE'S MAXIMUM LIABILITY WITH RESPECT TO ALL CLAIMS RELATING TO OR ARISING OUT OF THIS AGREEMENT IN A 12 MONTH PERIOD WILL NOT EXCEED THE FEES RECEIVED BY SUSE IN RESPECT OF THE PARTICULAR SUSE OFFERING DURING THAT TWELVE (12) MONTH PERIOD (OR FIFTY US DOLLARS ($50) IF YOU RECEIVED THE SUSE OFFERING(S) FREE OF CHARGE). THIS LIMITATION APPLIES REGARDLESS OF THE NATURE OF THE CLAIM, WHETHER CONTRACT, TORT (INCLUDING NEGLIGENCE), STATUTE OR OTHER LEGAL THEORY.

9.3. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, SUSE DOES NOT EXCLUDE OR LIMIT LIABILITY FOR (A) DEATH OR PERSONAL INJURY OR DEATH CAUSED BY ITS NEGLIGENCE, OR (B) FRAUD OR FRAUDULENT MISREPRESENTATION; OR (C) ANY OTHER LIABILITY THAT CANNOT BE LAWFULLY EXCLUDED OR LIMITED.

9.4. NOTHING IN THIS AGREEMENT LIMITS YOUR OBLIGATION TO MAKE PAYMENT OF FEES DUE AND PAYABLE UNDER THIS AGREEMENT OR EITHER PARTY'S LIABILITY UNDER SECTION 9.5.

9.5. IN RESPECT OF DISPUTES UNDER THIS AGREEMENT, EACH PARTY WILL, AT ITS SOLE COST AND EXPENSE, INDEMNIFY AND HOLD HARMLESS, THE OTHER PARTY (THE PREVAILING PARTY) AND ITS AFFILIATES FROM AND AGAINST ANY AND ALL LEGAL COSTS SUSTAINED BY THE PREVAILING PARTY IN CONNECTION WITH AN AWARD BY A COURT OF COMPETENT JURISDICTION (OR AN AGREED SETTLEMENT BETWEEN THE PARTIES), IN FAVOUR OF THE PREVAILING PARTY. "LEGAL COSTS" MEANS ALL LOSSES AND LIABILITIES ARISING FROM OR IN CONNECTION WITH LITIGATION (INCLUDING CONTEMPLATED LITIGATION), INCLUDING INTEREST, COURT COSTS, REASONABLE FEES OF ATTORNEYS, ACCOUNTANTS AND OTHER EXPERTS (ON AN INDEMNITY BASIS) OR OTHER REASONABLE FEES OF LITIGATION, OR WITH OTHER PROCEEDINGS OR WITH ANY CLAIM, DEFAULT OR ASSESSMENT.

10. Contracting Entity.

You are entering this Agreement with the SUSE entity that corresponds to your location as follows:

Your Location	SUSE Entity
Americas (except Canada)	SUSE LLC
Asia-Pacific (except India and Japan)	SUSE LLC
Canada	SUSE Software Solutions Canada ULC
India SUSE	SUSE Software Solutions India Private Ltd
Japan	SUSE Software Solutions Japan KK
Europe, Middle-East and Africa	SUSE Software Solutions Ireland Ltd

11. Governing Law

11.1. Except as specified in Section 11.2 or Section 11.3, this Agreement is governed by, construed in accordance with, and enforced under the substantive law of the State of New York, without giving effect to any contrary choice of law or conflict of law provision or rule (whether of the State of New York or other jurisdiction). Any claim or action brought by a party in connection with this Agreement, or any part hereof, will be brought in the appropriate federal or state court located in the State of New York, New York County, and the Parties irrevocably consent to the exclusive jurisdiction of such courts. In any action relating to this Agreement, each of the parties irrevocably waives the right to trial by jury.

11.2. If Your principal place of business is the United Kingdom, or a member state of the European Union or the European Free Trade Association, (1) the courts of Ireland shall have exclusive jurisdiction over any action of law relating to this Agreement; and (2) the laws of Ireland shall apply except where the laws of such country of Your principal place of business are required to be applied to any such action of law, in which case the laws of that country shall apply.

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11.3. If Your country of principal residence is in the People's Republic of China, the applicable law will be the law of the People's Republic of China. Where any dispute arises out of or in relation to this Agreement, SUSE or You may give notice in writing of the dispute to the other party, setting out the material particulars of the dispute and the parties must act in good faith to try to resolve the dispute quickly. Any dispute not re-solved between the parties within 30 days of such notice may be referred by either party to, and finally resolved by, arbitration in China in accordance with the Arbitration Rules of the China International Economic and Trade Arbitration Commission ("**CIETAC**") for the time being in force, which rules are deemed to be incorporated by reference in this Section 11.3. Each arbitration shall be conducted by one arbitrator (selected by agreement between the parties, or failing agreement, in accordance with the CIETAC Rules). Arbitration shall be conducted in the Chinese language and in confidence. The parties agree to comply with any arbitration award or order made pursuant to such arbitration and such award or order shall be final and binding on the parties

11.4. Neither the United Nations Convention on Contracts for the International Sale of Goods, nor New York or Ireland conflict of law rules apply to this Agreement or its subject matter.

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Exhibit A – Matrix of SUSE Products

SUSE Product	Unit of Measure	Stackable	Details
SUSE Linux Enterprise Server ("SLES")			
SLES for x86, AMD64 & Intel64, physical, x86 & x86-64, pre-May 2015	x86 & x86-64) per 1-2, 4 or 8 Sockets per Physical Server. Physical Deployment only	No	Appendix A
SLES for x86, AMD64 & Intel64, Unlimited Virtual Instances, x86 & x86-64, pre-May 2015	(x86 & x86-64) per 1-2, 4 or 8 Sockets per Physical Server. Unlimited Virtual Instances per Physical Server	No	Appendix A
SUSE Linux Enterprise Server, x86 & x86-64, 1-2 Sockets or 1-2 Virtual Machines	(x86 & x86-64) per 1-2 Sockets per Physical Server or 1-2 Virtual Machines	Yes	Appendix A
SUSE Linux Enterprise Server, x86 & x86-64, 1-2 Sockets with Unlimited Virtual Machines	(x86 & x86-64) per 1-2 Sockets with Unlimited Virtual Machines per Physical Server	Yes	Appendix A
SUSE Linux Enterprise Server for Education Usage, x86 & x86-64, 1-2 Sockets with Unlimited Virtual Machines	(x86 & x86-64) per 1-2 Sockets with Unlimited Virtual Machines per Physical Server	Yes	Appendix A
SUSE Linux Enterprise Server for Education Usage, x86 & x86-64, 1-2 Sockets or 1-2 Virtual Machines	(x86 & x86-64) per 1-2 Sockets per Physical Server or 1-2 Virtual Machines	Yes	Appendix A
SUSE Linux Enterprise Server for Education Usage with Lifecycle Management, x86 & x86-64, 1-2 Sockets with Unlimited Virtual Machines	(x86 & x86-64) per 1-2 Sockets per Physical Server or 1-2 Virtual Machines	Yes	Appendix A
SUSE Linux Enterprise Server for z Systems and LinuxONE, s390x	(s390x) per IFL or CP per IBM z Systems or IBM LinuxONE Physical Server	Yes	Appendix A
SUSE Linux Enterprise Server for POWER, ppc64, pre-Apr 2016	(ppc64) per Socket per Physical Server	Yes	Appendix A
SUSE Linux Enterprise Server for POWER, ppc64le, pre-Apr 2016	(ppc64le) per Socket per Physical Server	Yes	Appendix A
SUSE Linux Enterprise Server for POWER, ppc64, 1-2 Sockets or 1-2 Virtual Machines	(ppc64) per 1-2 Sockets per Physical Server or 1-2 Virtual Machines	Yes	Appendix A
SUSE Linux Enterprise Server for POWER, ppc64le, 1-2 Sockets or 1-2 Virtual Machines	(ppc64le) 1-2 Sockets per Physical Server or 1-2 Virtual Machines	Yes	Appendix A
SUSE Linux Enterprise Server for POWER, ppc64, 1-2 Sockets with Unlimited Virtual Machines	(ppc64) per 1-2 Sockets with Unlimited Virtual Machines per Physical Server	Yes	Appendix A
SUSE Linux Enterprise Server for POWER, ppc64le, 1-2 Sockets with Unlimited Virtual	(ppc64le) 1-2 Sockets with Unlimited Virtual	Yes	Appendix A

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SUSE Product	Unit of Measure	Stackable	Details
Machines	Machines per Physical Server		
SUSE Linux Enterprise Server with Live Patching, 1-2 Sockets with Unlimited Virtual Machines	(x86-64 or ppc64), 1-2 Sockets with Unlimited Virtual Machines	Yes	Appendix A
SUSE Linux Enterprise Server for Itanium Processor Family, ia64	(ia64) per Socket per Physical Server	Yes	Appendix A
SUSE Linux Enterprise Server for Arm 1-2 Virtual Machines	(Arm AArch64) per 1-2 Sockets per Physical Server or 1-2 Virtual Machine	Yes	Appendix A
SUSE Linux Enterprise Server for Arm Unlimited Virtual Machines	(Arm AArch64) per 1-2 Sockets with Unlimited Virtual Machines per Physical Server	Yes	Appendix A
SUSE Linux Enterprise Server for Arm, 1-2 Virtual Machines	(Arm AArch64) per group of 4 Cores	Yes	Appendix A
SUSE Linux Enterprise Server for Arm, Unlimited Virtual Machines	(Arm AArch64) per group of 4 Cores	Yes	Appendix A
SUSE Linux Enterprise Real Time with Live Patching, 1-2 Sockets with Unlimited Virtual Machines	(x86-64), 1-2 Sockets with Unlimited Virtual Machines	Yes	Appendix N
SUSE Linux Enterprise Real Time, 1-2 Sockets or 1-2 Virtual Machines	(x86-64), 1-2 Sockets or 1-2 Virtual Machines	Yes	Appendix N
SUSE Linux Enterprise Server for Raspberry Pi	(Raspberry Pi 3 Model B) per Physical System	Yes	Appendix A
SUSE Linux Enterprise Server with Expanded Support, 1-2 Sockets or 1-2 Virtual Machines	(x86 & x86-64) per 1-2 Sockets or 1-2 Virtual Machines	Yes	Appendix A
SUSE Linux Enterprise Server with Expanded Support, 1-2 Sockets with Unlimited Virtual Machines	(x86 & x86-64) per 1-2 Sockets with Unlimited Virtual Machines	Yes	Appendix A
SUSE Liberty Linux, 1-2 Sockets or 1-2 Virtual Machines	(x86 & x86-64) per 1-2 Sockets or 1-2 Virtual Machines	Yes	Appendix A
SUSE Liberty Linux, 1-2 Sockets with Unlimited Virtual Machines	(x86 & x86-64) per 1-2 Sockets with Unlimited Virtual Machines	Yes	Appendix A
SUSE Linux Enterprise Server for SAP Applications ("SLES for SAP Applications")			
SUSE Linux Enterprise Server for SAP Applications for AMD64 & Intel64, physical, (x86-64), pre-May 2015	(x86-64) per 1-2 or 4 or 8 Sockets per Physical Server	No	Appendix A
SUSE Linux Enterprise Server for SAP	(x86-64) per 1-2 or 4 or 8 Sockets per Physical	No	Appendix A

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SUSE Product	Unit of Measure	Stackable	Details
Applications for AMD64 & Intel64, Unlimited Virtual Instances, x86-64, pre-May 2015	Server. Unlimited Virtual Instances per Physical Server		
SUSE Linux Enterprise Server for SAP Applications, x86-64, 1-2 Sockets or 1-2 Virtual Machines	(x86-64) per 1-2 Sockets per Physical Server or 1-2 Virtual Machines	Yes	Appendix A
SUSE Linux Enterprise Server for SAP Applications, x86-64, 1-2 Sockets with Unlimited Virtual Machines	(x86-64) per 1-2 Sockets with Unlimited Virtual Machines per Physical Server	Yes	Appendix A
SUSE Linux Enterprise Server for SAP Applications, POWER, 1-2 Sockets with Unlimited Virtual Machines	(ppc64) 1-2 Sockets with Unlimited Virtual Machines per Physical Server	Yes	Appendix A
SUSE Linux Enterprise Server for SAP Applications with Live Patching, 1-2 Sockets with Unlimited Virtual Machines	(x86-64 or ppc64), 1-2 Sockets with Unlimited Virtual Machines	Yes	Appendix A
SUSE Linux Enterprise ("SLE") Extensions			
SUSE Linux Enterprise High Availability Extension for x86, AMD64 & Intel64 (SLE HA), x86 & x86-64, pre-May 2015	(x86 & x86-64) per 1-2 or 4 or 8 Sockets per Physical Server. Inherited Virtualization	No	Appendix B
SUSE Linux Enterprise High Availability Extension (SLE HA), x86 & x86-64	(x86 & x86-64) per 1-2 Sockets per Physical Server or 1-2 Virtual Machines with Inherited Virtualization	Yes	Appendix B
SUSE Linux Enterprise High Availability Extension (SLE HA), ppc64	(ppc64) per Socket per Physical Server	Yes	Appendix B
SUSE Linux Enterprise High Availability Extension (SLE HA), ia64	(ia64) per Socket per Physical Server	No	Appendix B
SUSE Linux Enterprise High Availability Extension (SLE HA), s390x	(s390x) per IFL or CP per IBM z Systems Physical Server	Yes	Appendix B
Geo Clustering for SUSE Linux Enterprise High Availability Extension for x86, AMD64 & Intel64 (Geo SLE HA), x86 & x86-64, pre-May 2015	(x86 & x86-64) per 1-2 or 4 or 8 Sockets per Physical Server. Inherited Virtualization	No	Appendix B
Geo Clustering for SUSE Linux Enterprise High Availability Extension (Geo SLE HA), x86 & x86-64	(x86 & x86-64) per 1-2 Sockets per Physical Server; requires SUSE Linux Enterprise High Availability Extension Subscription Offering for (x86 & x86-64)	Yes	Appendix B
Geo Clustering for SUSE Linux Enterprise High	(s390x) per IFL or CP on z Systems; requires	Yes	Appendix B

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SUSE Product	Unit of Measure	Stackable	Details
Availability Extension (Geo SLE HA), s390x	SUSE Linux Enterprise High Availability Extension Subscription Offering for (s390x)		
SUSE Linux Enterprise Live Patching, x86-64	(x86-64) per 1-2 Sockets per Physical Server or 1-2 Virtual Machines	Yes	Appendix B
SUSE Linux Enterprise Live Patching, ppc64le	(ppc64le) per 1-2 Sockets per Physical Server or 1-2 Virtual Machines	Yes	Appendix B
SUSE Linux Enterprise Server Long Term Service Pack Support, x86, for: • 1-100 Instances • 1-500 Instances • Unlimited Instances	(x86) per 1-100 or 1-500 or Unlimited Instances for the specified Service Pack	No	Appendix J
SUSE Linux Enterprise Server Long Term Service Pack Support, x86-64, for: • 1-100 Instances • 1-500 Instances • Unlimited Instances	(x86-64) per 1-100 or 1-500 or Unlimited Instances for the specified Service Pack	No	Appendix J
Reactive Long Term Service Pack Support, x86-64, for: • 1-100 Instances • 1-500 Instances • Unlimited Instances	(x86-64) per 1-100 or 1-500 or Unlimited Instances for the specified Service Pack	No	Appendix J
SUSE Linux Enterprise Server Long Term Service Pack Support, z Systems, s390x, for: • 1-5 IFLs • 1-10 IFLs • Unlimited IFLs	(s390x) per 1-5 IFLs or 1-10 IFLs or Unlimited IFLs for the specified Service Pack	No	Appendix J
SUSE Linux Enterprise Server Long Term Service Pack Support, x86 & x86-64	(x86 & x86-64) per 1-2 Sockets with Unlimited Virtual Machines per Physical Server	Yes	Appendix J
SUSE Linux Enterprise Server Long Term Service Pack Support, ppc64	(ppc64) per 1-2 Sockets with Unlimited Virtual Machines per Physical Server	Yes	Appendix J
SUSE Linux Enterprise for High Performance Computing Long Term Service Pack Support,	(x86-64, AArch64) per 1-2 Sockets per Physical Server	Yes	Appendix J

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SUSE Product	Unit of Measure	Stackable	Details
x86-64, Arm			
SUSE Linux Enterprise Real Time Extension (SLE RT), x86-64	(x86-64) per Physical Server	No	Appendix B
SUSE Linux Enterprise Workstation Extension, x86-64	(x86-64) per Instance; requires SUSE Linux Enterprise Server Subscription Offering for x86-64	No	Appendix B
Virtual Machine Driver Pack Extension up to 4 Virtual Images (VMDP), x86 & x86-64	(x86 & x86-64) per 1-4 Virtual Instances per Physical Server	No	Appendix B
Virtual Machine Driver Pack Extension, unlimited Virtual Images (VMDP), x86 & x86-64	(x86 & x86-64) per Unlimited Virtual Instances per Physical Server	No	Appendix B
SUSE Linux Enterprise High Availability Extension with Expanded Support	(x86 & x86-64) per 1-2 Sockets with Inherited Virtualization, Inherited Subscription	Yes	Appendix B
SUSE Liberty Linux High Availability Extension	(x86 & x86-64) per 1-2 Sockets with Inherited Virtualization, Inherited Subscription	Yes	Appendix B
SUSE Manager			
SUSE Manager Server for Intel64 & AMD64, x86-64 or s390x	(x86-64 or s390x) per Instance	No	Appendix E
SUSE Manager Server for Intel64 & AMD64, up to 50 Managed Instances, x86-64	(x86-64) per Instance for up to 50 Managed Instances	No	Appendix E
SUSE Manager Proxy for Intel64 & AMD64, x86-64	(x86-64) per Instance	No	Appendix E
SUSE Manager for Retail Branch Server, Intel64 & AMD64, x86-64	Per 1-2 Sockets with Unlimited Virtual Machines per Physical Server	No	Appendix E
SUSE Manager for Retail Branch Server All-in-one, Intel64 & AMD64, x86-64	Per 1-2 Sockets with Unlimited Virtual Machines per Physical Server	No	Appendix E
SUSE Manager Monitoring, physical deployment, x86 or x86-64 or ppc64 or ppc64le or ia64	(x86 or x86-64 or ppc64 or ppc64le or ia64) per 1-2 Sockets per Physical Server	Yes	Appendix E
SUSE Manager Monitoring (s390x)	(s390x) per IFL or CP per IBM z Systems Business Class or Enterprise Class Physical Server	Yes	Appendix E
SUSE Manager Monitoring, virtualized deployment, x86 or x86-64 or ppc64 or ppc64le	(x86 or x86-64 or ppc64 or ppc64le or ia64) per 1-2 Instances	Yes	Appendix E

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SUSE Product	Unit of Measure	Stackable	Details
or ia64			
SUSE Manager Monitoring, virtualized deployment Unlimited Virtualization, x86 or x86-64 or ppc64 or ppc64le or ia64	(x86 or x86-64 or ppc64 or ppc64le or ia64) per 1-2 Sockets per Physical Server. Unlimited Virtual Instances per Physical Server	Yes	Appendix E
SUSE Manager Lifecycle Management, physical deployment, x86 or x86-64 or ppc64 or ppc64le or ia64	(x86 or x86-64 or ppc64 or ppc64le or ia64) per 1-2 Sockets per Physical Server	Yes	Appendix E
SUSE Manager Lifecycle Management, virtualized deployment, x86 or x86-64 or ppc64 or ppc64le or ia64	(x86 or x86-64 or ppc64 or ppc64le or ia64) per 1-2 Instances or per 1-2 Virtual Instances	Yes	Appendix E
SUSE Manager Lifecycle Management, physical deployment, Arm AArch64	(Arm AArch64) per group of 4 Cores	Yes	Appendix E
SUSE Manager Lifecycle Management, physical deployment, Arm AArch64	(Arm AArch64) per 1-2 Sockets per Physical Server	Yes	Appendix E
SUSE Manager Lifecycle Management, virtualized deployment, x86 or x86-64 or ppc64 or ppc64le or ia64	(x86 or x86-64 or ppc64 or ppc64le or ia64 or Arm AArch64), per 1-2 Sockets per Physical Server. Unlimited Virtual Instances per Physical Server	Yes	Appendix E
SUSE Manager Lifecycle Management, virtualized deployment, s390x	(s390x) per IFL or CP per IBM z Systems Business Class or Enterprise Class Physical Server. Unlimited Virtual Instances per Physical Server	Yes	Appendix E
SUSE Manager Virtualization Management, x86-64	(x86-64) Per 1-2 Sockets per Physical Server	Yes	Appendix E
SUSE Manager Management Pack for Microsoft System Center	Per Microsoft System Center Operations Manager (SCOM) Instance	No	Appendix E
SUSE Manager Lifecycle Management+	(x86-64 or ppc64le), 1-2 Sockets or 1-2 Virtual Machines	Yes	Appendix E
SUSE Manager Lifecycle Management+	(x86-64 or ppc64le), 1-2 Sockets with Unlimited Virtual Machines	Yes	Appendix E
SUSE Manager Lifecycle Management+	(ARM with 16 or more Cores), 1-2 Sockets or 1-2 Virtual Machines	Yes	Appendix E
SUSE Manager Lifecycle Management+	(ARM with 16 or more Cores), 1-2 Sockets with Unlimited Virtual Machines	Yes	Appendix E
SUSE Manager Lifecycle Management+	Per IFL with Unlimited Virtual Machines	Yes	Appendix E

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SUSE Product	Unit of Measure	Stackable	Details
SUSE Linux Enterprise Desktop			
SUSE Linux Enterprise Desktop, x86 & x86-64	(x86 & x86-64) per Instance	No	Appendix G
SUSE Linux Enterprise Workstation Extension, x86-64	(x86-84) per Instance	No	Appendix B
SUSE Linux Enterprise Desktop for Education Usage with Lifecycle Management, x86 & x86-64, 1 Instance	(x86 & x86-84) per Instance	No	Appendix G
SUSE OpenStack Cloud			
SUSE OpenStack Cloud Control Node plus SUSE OpenStack Cloud Administration/Deployer Server MSRP, (x86-64)	(x86-64) per 1-2 Physical Servers	No	Appendix D
SUSE OpenStack Cloud Control Node MSRP	(x86-64) per Physical Server	No	Appendix D
SUSE OpenStack Cloud Compute Node MSRP	(x86-64) per 1-2 Sockets per Physical Server	Yes	Appendix D
SUSE OpenStack Cloud Swift Storage Node MSRP	(x86-64) per 1-2 Sockets per Physical Server	Yes	Appendix D
SUSE OpenStack Cloud Control Node for VMware	(x86-64) per Physical Server	No	Appendix D
SUSE OpenStack Cloud Control Node for zVM	(x86-64) per Physical Server	No	Appendix D
SUSE OpenStack Cloud Monitoring	(86-64) per 1-2 Sockets per Physical Server	Yes	Appendix D
SUSE Enterprise Storage			
SUSE Enterprise Storage Base Configuration, x86-64	(x86-64) per 4 OSD Nodes with 1-2 Sockets per Physical Server	No	Appendix F
SUSE Enterprise Storage Expansion Node, x86-64	(x86-64) per 1 OSD Node with 1-2 Sockets per Physical Server and up to 1 Instance of SES Infrastructure Node per 1-2 Socket per Physical Server or per 1 Virtual Machine	Yes	Appendix F
SUSE Enterprise Storage Base Configuration, AArch64	(AArch64) per 4 OSD Nodes with 1-2 Sockets per Physical Server	No	Appendix F
SUSE Enterprise Storage Expansion Node, AArch64	(AArch64) per 1 OSD Node with 1-2 Sockets per Physical Server and up to 1 Instance of SES Infrastructure Node per 1-2 Socket per Physical Server or per 1 Virtual Machine	No	Appendix F

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SUSE Product	Unit of Measure	Stackable	Details
SUSE Enterprise Storage deployed with Rook, x86-64	(x86-64) up to 12 OSDs	Yes	Appendix F
SUSE Enterprise Storage deployed with Rook	(AArch64) up to 12 OSDs	Yes	Appendix F
SUSE CaaS Platform			
SUSE CaaS Platform, x86-64, 1-2 Sockets or 1 Virtual Machine	(x86-64) per 1-2 Sockets per Physical Server or 1 Virtual Machine	Yes	Appendix H
SUSE CaaS Platform Migration Offering with Special Conditions, x86-64, 1-2 Sockets or 1 Virtual Machine	(x86-64) per 1-2 Sockets per Physical Server or 1 Virtual Machine	Yes	Appendix H
SUSE CaaS Platform, x86-64, 1-2 Sockets with Unlimited Virtual Machines	(x86-64) per 1-2 Sockets with Unlimited Virtual Machines per Physical Server	Yes	Appendix H
SUSE CaaS Platform Migration Offering with Special Conditions, x86-64, 1-2 Sockets with Unlimited Virtual Machines	(x86-64) per 1-2 Sockets with Unlimited Virtual Machines per Physical Server	Yes	Appendix H
SUSE Cloud Application Platform ("CAP")			
SUSE Cloud Application Platform, x86-64, 1 Core or 2 vCPUs	(x86-64) per 1 Core or 2 vCPUs	Yes	Appendix I
SUSE Cloud Application Platform (with infrastructure), x86-64, 1 Core or 2 vCPUs	(x86-64) per 1 Core or 2 vCPUs	Yes	Appendix I
SUSE Linux Enterprise Point of Service			
SUSE Linux Enterprise Point of Service Client ("SLE POS Client"), x86	(x86) per Device	No	Appendix C
SUSE Linux Enterprise Point of Service Branch Server ("SLE POS Branch Server"), x86 & x86-64	(x86 & x86-64) per Instance	No	Appendix C
SUSE Linux Enterprise Point of Service Administration Server ("SLE POS Admin Server"), x86 & x86-64	(x86 & x86-64) per Instance	No	Appendix C
SUSE Linux Enterprise for High Performance Computing			
SUSE Linux Enterprise for High Performance Computing ("SLE HPC"), x86-64 & Arm	(x86-64, AArch64) per 1-2 Sockets or 1-2 Virtual Machine per Physical Server	Yes	Appendix K
SUSE Linux Enterprise for High Performance Computing ESPOS ("SLE HPC ESPOS"), x86-64 & Arm	(x86-64, AArch64) per 1-2 Sockets or 1-2 Virtual Machine per Physical Server	Yes	Appendix K

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SUSE Product	Unit of Measure	Stackable	Details
SUSE Linux Enterprise for High Performance Computing LTSS ("SLE HPC LTSS"), x86-64 & Arm	(x86-64, AArch64) per 1-2 Sockets per Physical Server	Yes	Appendix K
SUSE Linux Enterprise Micro			
SUSE Linux Enterprise Micro	(x86-64, AArch64), 1-16 Virtual Cores	Yes	Appendix L
SUSE Rancher			
SUSE Rancher Management Server	(x86-64), per Instance	No	Appendix M
SUSE Rancher Additional Management Server	(x86-64), per Instance	No	Appendix M
SUSE Rancher Node	(x86-64), per Instance	No	Appendix M
SUSE Rancher Hosted Management Server	(x86-64), per Instance	No	Appendix M
Cloud Kubernetes Node	x86-64, per Instance	No	Appendix M
Longhorn	(x86-64), per Instance	No	Appendix M
Harvester	32 Cores	Yes	Appendix M

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Appendix A – SUSE Linux Enterprise Server and SUSE Linux Enterprise Server for SAP Applications

SUSE Linux Enterprise Server Subscription Offerings and Units of Measure

Effective May 1st 2015 for SUSE Linux Enterprise Server for x86 and x86-64, and effective April 1st 2016 for SUSE Linux Enterprise Server for POWER.

Operating Environments and Unit of Measure

Each Physical Server, Virtualization Host or Virtualization Environment on which SUSE Linux Enterprise Server is deployed, installed, used or executed must have a Subscription Offering. Except for our Arm AArch64 processor Subscription offerings, Units of Measure do not differentiate between single core, multi-core or simultaneous multi-threading capable Processors.

For Virtualization Environments, if the Unit of Measure chosen is per number of Sockets with Unlimited Virtual Machines per Physical Server, only Physical Servers for which the appropriate Subscription Offering has been acquired may be used to deploy such Virtualization Environment, irrespective of whether such Physical Server is actually used or for how long such Physical Server is used.

A SUSE Linux Enterprise Server Subscription Offering must not be used as Subscription Offering for SUSE Linux Enterprise Server for SAP Applications. However, a Subscription Offering for SUSE Linux Enterprise Server for SAP Applications can alternatively (but not concurrently) be used as a SUSE Linux Enterprise Server Subscription OfferingTo change the deployment type of a Product during the Subscription Offering period, You must choose the highest valued Subscription Offering matching Your different deployment types for this Product. For example, if You deploy the higher valued SUSE Linux Enterprise Server Subscription Offering for '1-2 Sockets with Unlimited Virtual Machines' during the Subscription Offering period for a deployment scenario matching a lower valued (when compared to the 1-2 Sockets with Unlimited Virtual Machines Subscription Offering) '1-2 Sockets or 1-2 Virtual Machines', You may continue to use the higher valued Subscription Offering for the remaining subscription period. However, You may not deploy the lower valued SUSE Linux Enterprise Server Subscription Offering for '1-2 Sockets or 1-2 Virtual Machines' during the Subscription Offering period for a deployment type matching the higher valued '1-2 Sockets with Unlimited Virtual Machines' Subscription Offering.

Subscription Offerings for 1-2 Sockets or 1-2 Virtual Machines

These Subscription Offerings are intended for flexible deployments on Physical Servers and low-density or cloud virtualization.

Deployment on Physical Servers

The number of Subscription Offerings needed for a Physical Server is determined by the number of Sockets in the Physical Server.

Physical Servers with 1 - 2 Sockets need 1 Subscription Offering for "1-2 Sockets or 1-2 Virtual Machines."

For Physical Servers with more than 2 Sockets, Subscription Offerings are Stackable to match or exceed the number of Sockets. For example, a Physical Server with 4 Sockets needs 2 Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines."

Subscription Offerings can be transferred to new and/or different Physical Servers. For example, when 10 Physical Servers with 2 Sockets each are replaced by 4 Physical Servers with 4 Sockets each, the 10 "1-2 Sockets or 1-2 Virtual Machines" Subscription Offerings can be transferred to the new Physical Servers. In this example, a total of 8 Subscription Offerings (2 per Physical Server with 4 Sockets) are transferred to the new Physical Servers. You can use the remaining 2 Subscription Offerings for later deployments.

Low-Density or Cloud Deployments

Up to 2 Virtual Machines running on the same Virtualization Host or Virtualization Environment or within the same Private Cloud account or Public Cloud zone can be deployed with one "1-2 Sockets or 1-2 Virtual Machines" Subscription Offering.

Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines" can also be repurposed as Virtual Machines on any Virtualization Host, Virtualization Environment or with any SUSE certified Cloud Services Provider (CSP).

At any point in time, a Subscription Offering for "1-2 Sockets or 1-2 Virtual Machines" can only be deployed either on a Physical Server or as Virtual Machines. For clarity, a Subscription Offering for "1-2 Sockets or 1-2 Virtual Machines" cannot be used for 1 Socket on a Physical Server and 1 Virtual Machine.

Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines" may not be used as a Virtualization Host. Virtualization Host capability is provided pursuant to the Subscriptions for 1-2 Sockets with Unlimited Virtual Machine defined below.

Subscription Offerings for 1-2 Sockets with Unlimited Virtual Machines

For high-density Virtualized Deployment a Subscription Offering for "1-2 Sockets with Unlimited Virtual Machines." is available. This Subscription Offering entitles You to deploy an unlimited number of Virtual Machines per 1-2 Sockets on a Virtualization Host. For Virtualization Hosts with more than 2 Sockets, Subscription Offerings are Stackable to match or exceed the number of Sockets. This Subscription Offering can be used on any third-party Virtualization Host and also includes the entitlement to run SUSE Linux Enterprise for x86-64 Xen or KVM as the Virtualization Host.

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Subscription Offerings for "1-2 Sockets with Unlimited Virtual Machines" may be deployed alternatively (but not concurrently) as 1 or 2 Virtual Machines on any Virtualization Host or with any Cloud Services provider which is authorized by SUSE (Bring Your Own Subscription or "BYOS"). Unlike Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines" ("Low-Density"), Subscription offerings for 1-2 Sockets with Unlimited Virtual Machines must be acquired for each Virtualization Host capable of deploying SUSE Products within a Virtualization Environment.

SUSE Linux Enterprise Server for SAP with Unlimited Virtual Machines Subscription Offering allows you to run SUSE Linux Enterprise Server for SAP, SUSE Linux Enterprise Server or SUSE Linux Enterprise Micro as the host OS or use a third party VM host. It also allows you to use any combination of SUSE Linux Enterprise Server for SAP, SUSE Linux Enterprise Server or SUSE Linux Enterprise Micro as guest VM.

SUSE Linux Enterprise Server with Unlimited Virtual Machines Subscription Offering allows you to run SUSE Linux Enterprise Server or SUSE Linux Enterprise Micro as the host OS or use a third party VM host. It also allows you to use any combination of SUSE Linux Enterprise Server or SUSE Linux Enterprise Micro as guest VM.

Effective July 1st 2021 for SUSE Linux Enterprise Server for x86-64 and Power and for SUSE Linux Enterprise Server for SAP Applications for x86-64 and Power

Starting July 1st 2021, the x86-64 and Power Subscription Offerings for SUSE Linux Enterprise Server for SAP Applications with Live Patching, 1-2 Sockets with Unlimited Virtual Machines and SUSE Linux Enterprise Server with Live Patching, 1-2 Sockets with Unlimited Virtual Machines will respectively replace the existing Subscription Offerings for SUSE Linux Enterprise Server for SAP Applications, 1-2 Sockets with Unlimited Virtual Machines and SUSE Linux Enterprise Server, 1-2 Sockets with Unlimited Virtual Machines. This has no effect on Subscription Offerings for these products acquired before this date.

Both Standard and Priority Subscription Offerings for SUSE Linux Enterprise Server for SAP Applications with Live Patching, 1-2 Sockets with Unlimited Virtual Machines and SUSE Linux Enterprise Server with Live Patching, 1-2 Sockets with Unlimited Virtual Machines will include SUSE Linux Enterprise Live Patching. SUSE Linux Enterprise Live Patching must be purchased separately for SUSE Linux Enterprise Server and SUSE Linux Enterprise Server for SAP Applications Subscription Offerings for 1-2 Sockets or 1-2 Virtual Machines.

z Systems ("s390x")

For a Physical Server with IBM z Systems Processors (s390x), the number of required Subscription Offerings for Your environment must match or exceed the number of IFLs on which SUSE Linux Enterprise Server is deployed, installed, used or executed. You can use an unlimited number of SUSE Linux Enterprise Server Instances per IFL. All these SUSE Linux Enterprise Server Instances must have a Subscription Offering, either Basic or a mix of Standard or Priority. Subscription Offerings are available for EC (Enterprise Class), BC (Business Class) type IBM z Systems models, and IBM LinuxONE type systems. The Unit of Measure for these Subscription Offerings is per IFL. If a single IFL on a specific Physical Server is used as an IFLe, then only IFLe use is permitted on that specific Physical Server. SUSE Linux Enterprise High Availability Extension (SLE HA) Subscription Offerings are included in SUSE Linux Enterprise Server for z Systems Subscription Offering.

Solely in the case of a Physical Server with IBM z Systems Processors (s390x) with LinuxONE feature code 0650, You can use the SUSE Linux Enterprise Server for LinuxONE Express Subscription Offering. The number of required SUSE Linux Enterprise Server for LinuxONE Express Subscription Offerings must match or exceed the number of IFLs on which SUSE Linux Enterprise Server is deployed, installed, used or executed. The maximum number of Subscription Offerings that can be purchased and/or deployed for any one Physical Server with IBM z Systems Processors (s390x) with LinuxONE feature code 0650 must not exceed thirteen (13) IFLs. The Unit of Measure for these Subscription Offerings is per IFL. SUSE Linux Enterprise High Availability Extension (SLE HA) Subscription Offerings are not included in SUSE Linux Enterprise Server for LinuxONE Express Subscription Offerings.

Sub-Capacity for ppc64le Power servers

Physical Servers with PowerVM virtualization provide a hardware platform designed for workload consolidation with high scalability (192 cores + 64 TB memory) of servers combined with efficient virtualized resource management. SUSE Subscription Offerings for Power servers may be purchased for a subset of the Sockets on the Physical Server. This is known as Sub-Capacity pricing.

Sub-Capacity pricing is available for SUSE Subscription Offerings running on Power servers with four or more physical Sockets and PowerVM virtualization. Sub-capacity pricing can be used for all SUSE Subscription Offerings that are based on a 1-2 Socket charge metric including but not limited to SUSE Linux Enterprise Server for Power, SUSE Linux Enterprise Server for SAP Applications for Power, SUSE Linux Enterprise High Availability Extension for Power, SUSE Linux Enterprise Live Patching, SUSE Manager, and SUSE Manager Lifecycle Management.

For example, if a Power 980 server with 16 Sockets of total capacity is configured to only provide 8 Sockets of Processor capacity to SUSE Linux Enterprise Server for Power, then You only have to purchase four 1-2 Socket Subscription Offerings for SUSE Linux Enterprise Server for Power. This is useful for customers that consolidate multiple SUSE and non-SUSE workloads on a single Physical Server.

Prerequisites for Sub-Capacity pricing on Power servers include:

- Must be server based on POWER8 or later generation Processors
- The Physical Server must have four or more physical Sockets
- PowerVM virtualization must be used to limit that amount of Processor capacity available to run the SUSE Subscription Offerings using PowerVM methodologies such as Dedicated processor partitions (Dedicated LPAR), Dynamic LPAR, Single or Multiple Shared Processor Pools

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Note: Integrated Facility for Linux (IFL) on Power does not automatically limit SUSE Subscription Offerings to only run on IFL Processors.

Calculating Socket Pair Equivalent for ppc64le Power servers: IBM PowerVM virtualization assigns Processor capacity to an LPAR/VM in 1/20th increments of a Processor Core. Since SUSE Subscription Offerings for IBM Power are sold by Socket Pairs, it is necessary to calculate the "Socket Pair Equivalent" of Processor capacity assigned to a SUSE Subscription Offering when using Sub-Capacity. IBM Power servers vary the number of physical Processor Cores per physical Socket from 8 to 12 Cores. Due this variability, it is necessary to calculate the Socket Pair Equivalent for each individual Physical Server because the Cores/Socket can vary between Physical Servers.

To calculate the Socket Pair Equivalent, the number of whole Processor Cores available to run the SUSE Subscription Offering are divided by the number of Cores for each physical Socket Pair in the Physical Server for which Subscription Offerings are being acquired.

For example, an eight Socket Power Physical Server with ten Cores per physical Socket and 40 Processor Cores assigned to SUSE Linux for SAP Applications for Power, the calculation is 40 Cores divided by 20 Cores (the Cores per Socket Pair on this Physical Server) = 2 Socket Pair Equivalent. You would need to purchase two SUSE Linux Enterprise Server for SAP Applications on Power Subscription Offerings. You must calculate the Socket Pair Equivalent calculation for each SUSE Subscription Offering running on that Physical Server.

When calculating the Socket Pair Equivalent, any fractional Cores or fractional Socket Pairs must be rounded up to the next highest integer. For example, if the number of Cores of capacity available to the SUSE Subscription Offering was "40.4", you would round the number of Cores to "41". Similarly, if the number of Sockets in the Socket Pair Equivalent is "2.1", the Socket Pair Equivalent is rounded up to "3".

Should You increase the Processor capacity you must correspondingly increase the number of SUSE Subscription Offerings. Note that changes to Processor pools or LPAR/VM configuration may require the acquisition of additional SUSE Subscription Offerings.

Itanium Processor Family ("ia64")

For a Physical Server with Itanium Processors ("ia64"), the number of required Subscription Offerings must match or exceed the number of Sockets on which SUSE Linux Enterprise Server is deployed, installed, used or executed. Customers may use an unlimited number of SUSE Linux Enterprise Server Instances per Socket. All these SUSE Linux Enterprise Server Instances must have a Subscription Offering, either Basic or a mix of Standard or Priority.

Intel or AMD Processors ("x86" or "x86-64"), Physical Deployment (Pre May 1st, 2015)

For a Physical Server with 32-bit or 64-bit Processors, the number of required Subscription Offerings must match or exceed the number of Sockets per Physical Server. If necessary, the CPU count per Physical Server must be rounded up to the next available Subscription Offering. Subscription Offerings are available for 1-2 CPU Sockets, 4 CPU Sockets or 8 CPU Sockets. One Subscription Offering cannot be used to entitle more than one Physical Server. Each Physical Server on which SUSE Linux Enterprise Server is deployed, installed, used or executed must have a Subscription Offering: either Basic or a mix of Standard or Priority. Virtualized Deployment of SUSE Linux Enterprise Server is not permitted with these Subscription Offerings (see "Virtualized Deployment" below).

Intel or AMD Processors ("x86" or "x86-64"), Virtualized Deployment (Pre May 1st, 2015)

For a Physical Server with 32-bit or 64-bit Processors, "Unlimited Virtual" Subscription Offerings are available for Virtualized Deployments of SUSE Linux Enterprise Server for use as Virtual Guest and/or Virtualization Host. You can use an unlimited number of SUSE Linux Enterprise Server Instances per Physical Server. The number of required "Unlimited Virtual" Subscription Offerings for Your Physical Server must match or exceed the number of Sockets per Physical Server on which SUSE Linux Enterprise Server is deployed, installed, used or executed. If necessary, the Socket count per Physical Server must be rounded up to the next available Subscription Offering.

"Unlimited Virtual" Subscription Offerings are available for 1-2 CPU Sockets, 4 CPU Sockets, or 8 CPU Sockets. One Subscription Offering cannot be used to entitle more than one Physical Server. Each Physical Server on which SUSE Linux Enterprise Server is deployed, installed, used or executed must have a Subscription Offering: either Basic or a mix of Standard or Priority.

POWER ("ppc64 or ppc64le"), (Pre April 1st, 2016)

For a Physical Server with POWER Processors (ppc64 or ppc64le), the number of required Subscription Offerings for Your environment must match or exceed the number of Sockets on which SUSE Linux Enterprise Server is deployed, installed, used or executed. You can use an unlimited number of SUSE Linux Enterprise Server Instances per Socket. All these SUSE Linux Enterprise Server Instances must have a Subscription Offering, either Basic or a mix of Standard or Priority.

Arm AArch64 Processors ("AArch64"), Subscription Offerings for 1-2 Sockets or 1-2 Virtual Machines

These Subscription Offerings are intended for flexible deployments on Physical Servers and low-density or cloud virtualization.

The number of Subscription Offerings needed for a Physical Server is determined by the number of Cores or Sockets in the Physical Server.

For Physical Servers with 16 or more Cores, the Subscription Offering is based on 1-2 Sockets. For example, a Physical Arm server with 16 Cores would require a single 1-2 Socket Subscription Offering.

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For Physical Servers with more than 2 Sockets, Subscription Offerings are Stackable to match or exceed the number of Sockets. For example, a Physical Server with 4 Sockets needs 2 Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines." The maximum number of Cores per Socket Pair is limited to 144. One Subscription Offering cannot be used to entitle more than one Physical Server.

Each Physical Server on which SUSE Linux Enterprise Server is deployed, installed, used or executed must have a Subscription. Subscription Offerings can be transferred to new and/or different Physical Servers. For example, when 10 Physical Servers with 2 Sockets each are replaced by 4 Physical Servers with 4 Sockets each, the 10 "1-2 Sockets or 1-2 Virtual Machines" Subscription Offerings can be transferred to the new Physical Servers. In this example, a total of 8 Subscription Offerings (2 per Physical Server with 4 Sockets) are transferred to the new Physical Servers. You can use the remaining 2 Subscription Offerings for later deployments.

Up to 2 Virtual Machines running on the same Virtualization Host or Virtualization Environment or within the same Private Cloud account or Public Cloud zone can be deployed with one "1-2 Sockets or 1-2 Virtual Machines" Subscription Offering.

Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines" can also be repurposed as Virtual Machines on any Virtualization Host or with any SUSE certified Cloud Services Provider (CSP).

At any point in time, a Subscription Offering for "1-2 Sockets or 1-2 Virtual Machines" can only be deployed either on a Physical Server or as Virtual Machines. For clarity, a Subscription Offering for "1-2 Sockets or 1-2 Virtual Machines" cannot be used for 1 Socket on a Physical Server and 1 Virtual Machine.

Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines" may not be used as a Virtualization Host. Virtualization Host capability is provided pursuant to the Subscriptions for 1-2 Sockets with Unlimited Virtual Machine defined below.

Arm AArch64 Processors ("AArch64), Subscription Offerings for 1-2 Sockets with Unlimited Virtual Machines

For a Physical Server with 64-bit Arm AArch64 Processors, "Unlimited Virtual" Subscription Offerings are available for Virtualized Deployments of SUSE Linux Enterprise Server for use as Virtual Guest and/or Virtualization Host.

For Physical Servers with 16 or more Cores, the Unlimited Virtual Machine Subscription Offering is based on 1-2 Sockets. For example, an Arm Physical Server with 16 Cores would require a single 1-2 Socket Unlimited Virtual Machine Subscription Offering.

This Subscription Offering entitles You to deploy an unlimited number of Virtual Machines per Subscription Offering on a Virtualization Host. For Virtualization Hosts with more than 2 Sockets, Subscription Offerings are Stackable to match or exceed the number of Sockets. This Subscription Offering can be used on any third-party Virtualization Host and also includes the entitlement to run SUSE Linux Enterprise Xen or KVM as the Virtualization Host One Subscription Offering cannot be used to entitle more than one Physical Server.

Each Physical Server on which SUSE Linux Enterprise Server is deployed, installed, used or executed must have a Subscription.

Arm AArch64 Processors ("AArch64"), 1-2 Virtual Machines per 4 Cores

For Physical Servers with less than 16 physical Arm Cores, the Subscription Offerings are based on groups of 4 Cores. These Subscription Offerings are stackable up to a total of 15 Cores per Physical Server. For example, an Arm Physical Server such as a Raspberry Pi with a total of 4 Cores would need a single, 4-Core group Subscription Offering. An Arm Physical Server with 12 Cores would require three 4-Core group Subscription Offerings. An Arm Physical Server with 15 Cores would require four 4-Core group Subscription Offerings.

For a Physical Server with 64-bit Arm AArch64 Processors, the number of required Subscription Offerings must match or exceed the number of Cores in the Physical Server divided by four (4) and if necessary rounded to the next integer. Subscription Offerings are available for each group of 4 Cores. One Subscription Offering cannot be used to entitle more than one Physical Server.

Each Physical Server on which SUSE Linux Enterprise Server is deployed, installed, used or executed must have a Subscription. Virtualized Deployment of SUSE Linux Enterprise Server is not permitted with these Subscription Offerings (see "Virtualized Deployment" below).

Arm AArch64 Processors ("AArch64"), Unlimited Virtual Machines per 4 Cores

For a Physical Server with 64-bit Arm AArch64 Processors, "Unlimited Virtual Machines" Subscription Offerings are available for Virtualized Deployments of SUSE Linux Enterprise Server for use as Virtual Guest and/or Virtualization Host.

For Arm Physical Servers with less than 16 Cores, the Subscription Offerings are based on groups of 4 Cores. These Subscription Offerings are stackable up to a total of 15 Cores per Physical Server. For example, an Arm Physical Server with a total of 4 Cores would need a single, 4-Core group Unlimited Virtual Machine Subscription Offering. An Arm Physical Server with 12 Cores would require three 4-Core group Unlimited Virtual Machine Subscription Offerings.

This Subscription Offering entitles You to deploy an unlimited number of Virtual Machines per 4 Cores on a Virtualization Host. For Virtualization Hosts with more than 4 Cores, Subscription Offerings are Stackable to match or exceed the number of Cores. This Subscription Offering can be used on any third-party Virtualization Host and also includes the entitlement to run SUSE Linux Enterprise Xen or KVM as the Virtualization Host

The number of required "Unlimited Virtual Machines" Subscription Offerings for Your Physical Server must match or exceed the number of Cores in the Physical Server divided by four (4) and if necessary rounded to the next integer for each Core on which SUSE Linux Enterprise Server is deployed, installed, used or executed.

Each Physical Server on which SUSE Linux Enterprise Server is deployed, installed, used or executed must have a Subscription Offering.



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SUSE Linux Enterprise Server with Expanded Support Subscription Offerings and Units of Measure

When You acquire SUSE Linux Enterprise Server with Expanded Support, You are actually acquiring a Subscription Offering for SUSE Linux Enterprise Server, but with the added entitlement for Expanded Support. As such, the Units of Measure for SUSE Linux Enterprise Server with Expanded Support are the same as for the corresponding SUSE Linux Enterprise Server Subscription Offering (e.g. with Unlimited Virtual Machines).

SUSE Liberty Linux Subscription Offerings and Units of Measure

When You acquire SUSE Liberty Linux, You are actually acquiring a Subscription Offering for SUSE Linux Enterprise Server, but with the added entitlement for SUSE Liberty Linux. As such, the Units of Measure for SUSE Liberty Linux are the same as for the corresponding SUSE Linux Enterprise Server Subscription Offering (e.g. with Unlimited Virtual Machines).



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Appendix B – SUSE Linux Enterprise Extensions

SUSE Linux Enterprise High Availability Extension

SUSE Linux Enterprise High Availability Extension is a SUSE Product based on open source technology to implement highly available Linux clusters. It is supported on all Physical and Virtual Deployments where SUSE Linux Enterprise Server (x86, x86-64, ppc64, ia64, s390x) is supported.

Unit of Measure is the same as the Unit of Measure for SUSE Linux Enterprise Server Subscription Offerings for x86, AMD64 & Intel64, and POWER (see Appendix A).

Organizations with a Current SUSE Linux Enterprise Server Subscription Offering for Itanium (ia64), or z Systems (s390x) are entitled to receive Subscription Offering benefits for SUSE Linux Enterprise High Availability Extension for the respective Hardware Architecture. Organizations with a SUSE Linux Enterprise Server Subscription Offering for POWER (ppc64) purchased before April 1st 2016, are entitled to receive Subscription Offering benefits for SUSE Linux Enterprise High Availability Extension.

SUSE Linux Enterprise High Availability Extension Subscription Offering benefits are determined by and inherited from the underlying SUSE Linux Enterprise Server Subscription Offering benefits.

Geo Clustering for SUSE Linux Enterprise High Availability Extension

To receive Subscription Offering benefits for Geographically Clustered Linux Servers, separate Geo Clustering for SUSE Linux Enterprise High Availability Extension Subscription Offerings are required, in addition to Current SUSE Linux Enterprise Server and SUSE Linux Enterprise High Availability Extension Subscription Offerings.

Unit of Measure for Geo SLE HA is the same as the Unit of Measure for SUSE Linux Enterprise Server for x86, AMD64 & Intel64 (x86 / x86-64), and z Systems (s390x) Subscription Offerings in Appendix A. Subscription Offering benefits for Geo Clustering for SUSE Linux Enterprise High Availability Extension are determined by and inherited from the Subscription Offering benefit of the underlying SUSE Linux Enterprise Server Subscription Offerings.

SUSE Linux Enterprise Server Real Time Extension

To receive Subscription Offering benefits for SUSE Linux Enterprise Server Real Time Extension ("SLE RT"), a separate SLE RT Extension Subscription Offering is required in addition to a Current SUSE Linux Enterprise Server Subscription Offering (see Appendix A) either for Physical Deployment or Unlimited Virtual Machines.

Unit of Measure for SLE RT is per Physical Server. Subscription Offering benefits for SLE RT are determined by and inherited from the underlying SUSE Linux Enterprise Server Subscription Offering.

SUSE Linux Enterprise Virtual Machine Driver Pack Extension

To receive Subscription Offering benefits for SUSE Linux Enterprise Virtual Machine Driver Pack Extension ("SLE VMDP"), a Current SUSE Linux Enterprise Server Subscription Offering is required (see Appendix A). Purchasing SLE VMDP Subscription Offerings without a Current SUSE Linux Enterprise Server Subscription Offering does not entitle You to receive Subscription Offering benefits for SLE VMDP.

Unit of Measure for SLE VMDP is either per 1 to 4 Virtual Instances per Physical Server or unlimited number of Virtual Instances per Physical Server. Subscription Offering benefits for SLE VMDP are determined by the Subscription Offering benefit of the underlying SUSE Linux Enterprise Server Subscription Offering.

SUSE Linux Enterprise Workstation Extension Units of Measure

Units of Measure do not differentiate between single core or multi-core, or simultaneous multi-threading capable Processors. SUSE Linux Enterprise Workstation Extension ("SLE WE") requires one Current SLES Subscription Offering per Physical Server in addition to the respective SLE WE Instances.

SUSE Linux Enterprise Workstation Extension for Intel or AMD Processors ("x86-64"), Physical Deployment

For Physical Servers with 64-bit Processors, the number of Subscription Offerings must match or exceed the number of Physical Servers or Devices, where SLE WE is deployed, installed, used or executed. Subscription Offering benefits for SLE WE are determined by and inherited from the Subscription Offering benefits of the underlying SUSE Linux Enterprise Server Subscription Offering. Virtualized Deployment of SUSE Linux Enterprise Workstation Extension is not permitted with this Subscription Offering. (See Virtualized Deployment below.) One Subscription Offering cannot be used to entitle more than one Physical Server.

SUSE Linux Enterprise Workstation Extension for Intel or AMD Processors ("x86-64"), Virtualized Deployment

For Physical Servers with 64-bit Processors, the number of Subscription Offerings must match or exceed the number of Instances of SUSE Linux Enterprise Workstation Extension for use as Virtual Instance. You can use an unlimited number of SUSE Linux Enterprise Workstation Instances per Physical Server. One Subscription Offering cannot be used to entitle more than one Virtual Instance. Each Virtual Instance on a Virtualization Host on which SUSE Linux Enterprise Workstation Extension is deployed, installed, used or executed



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must have a Subscription Offering. Subscription Offering benefits for SLE WE are determined by and inherited from the Subscription Offering benefits of the underlying SUSE Linux Enterprise Server Subscription Offering.

SUSE Linux Enterprise High Availability Extension with Expanded Support

When You acquire SUSE Linux Enterprise High Availability Extension with Expanded Support, You are actually acquiring a Subscription Offering for SUSE Linux Enterprise High Availability Extension, but with the added entitlement for Expanded Support. As such, the Units of Measure for SUSE Linux Enterprise High Availability Extension with Expanded Support are the same as for the corresponding SUSE Linux Enterprise High Availability Subscription Offering.

SUSE Liberty Linux High Availability Extension

When You acquire SUSE Liberty Linux High Availability Extension, You are actually acquiring a Subscription Offering for SUSE Linux Enterprise High Availability Extension, but with the added entitlement for SUSE Liberty Linux. As such, the Units of Measure for SUSE Liberty Linux High Availability Extension are the same as for the corresponding SUSE Linux Enterprise High Availability Subscription Offering.

SUSE Linux Enterprise Live Patching

SUSE Linux Enterprise Live Patching is a SUSE Product based on open source technology to implement code updates during operation of the system. It is supported on all Physical and Virtual Deployments starting with SUSE Linux Enterprise Server 12 on x86-64 and POWER (ppc64le) and IBM z Systems (s390x).

Unit of Measure for SUSE Linux Enterprise Live Patching is the same as SUSE Linux Enterprise Server Subscription Offerings for x86-64 and POWER (ppc64le), and IBM z Systems (s390x) respectively (see Appendix A).

SUSE Linux Enterprise Live Patching Subscription Offering requires an underlying Current SUSE Linux Enterprise Server Priority Subscription Offering (except for SUSE Linux Enterprise Server x86-64 and Power and SUSE Linux Enterprise Server for SAP x86-64 and Power from July 01, 2021 as described below). Subscription Offering benefits are available for the kernel versions listed on https://www.suse.com/products/live-patching/. The list is subject to change at SUSE's discretion and your entitlement to receive Subscription Offering benefits may be conditioned on Your deployment of a current version from this list.

For SUSE Linux Enterprise Live Patching Subscription Offerings purchased after July 1st, 2021 the following rules apply:

Starting July 01, 2021, the x86-64 and Power Subscription Offerings for SUSE Linux Enterprise Server for SAP Applications with Live Patching, 1-2 Sockets with Unlimited Virtual Machines and SUSE Linux Enterprise Server with Live Patching, 1-2 Sockets with Unlimited Virtual Machines will respectively replace the existing Subscription Offerings for SUSE Linux Enterprise Server for SAP Applications, 1-2 Sockets with Unlimited Virtual Machines and SUSE Linux Enterprise Server, 1-2 Sockets with Unlimited Virtual Machines. This has no effect on Subscription Offerings for these products acquired before this date.

Both Standard and Priority Subscription Offerings for SUSE Linux Enterprise Server for SAP Applications with Live Patching, 1-2 Sockets with Unlimited Virtual Machines and SUSE Linux Enterprise Server with Live Patching, 1-2 Sockets with Unlimited Virtual Machines will include SUSE Linux Enterprise Live Patching.

SUSE Linux Enterprise Live Patching must be purchased separately for SUSE Linux Enterprise Server and SUSE Linux Enterprise Server for SAP Applications Subscription Offerings for 1-2 Sockets or 1-2 Virtual Machines. SUSE Linux Enterprise Live Patching must be purchased separately for server Subscription Offerings for IBM z Systems.

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Appendix C – SUSE Linux Enterprise Point of Service

SUSE Linux Enterprise Point of Service ("SLE POS") Subscription Offerings and Units of Measure

Subscription Offerings for SUSE Linux Enterprise Point of Service (SLE POS) include access to SUSE Linux Enterprise Server and maintenance updates. Subscription Offering benefits are limited to the use of those components in a SLE POS solution as outlined below. In order for any individual Device to be eligible for Subscription Offering benefits, all Physical Servers, Instances, and Client Devices used as part of a SLE POS solution must have a Current Subscription Offering.

SLE POS Administration Server

At least one administration server is needed in a typical SLE POS environment. The administration server manages all point of service Devices and serves as the central repository for configuration information. It also keeps the master operating systems for the point of service Devices.

Point of service operating systems are built from templates, using SUSE Linux Enterprise and its maintenance updates as the base. Point of service operating systems can be built on the same Instance used as the administration server or on a separate Physical or Virtual Server Instance. All administration Physical Servers or operating system build Instances must have a "SUSE Linux Enterprise Point of Service Admin Server" Subscription Offering.

Additional workloads may only be run on an administration server if they are directly related to running the SLE POS solution. All other workloads must have SUSE Linux Enterprise Server Subscription Offerings.

SLE POS Branch Server

SUSE recommends using at least one branch server per branch. It is possible to run the SLE POS branch server function directly off the administration server for small-scale implementations of SLE POS. In this case, only an administration server Subscription Offering is needed.

The branch server provides the infrastructure for booting the point of service Client Devices from the local network, registering new Client Devices at the site and distributing operating system updates to the Client Devices. SLE POS Branch Server Subscription Offerings can be used for the actual point of service branch server as well as other SUSE Linux Enterprise Server Instances running at a branch, provided that they are used solely to serve data or applications to the point of service Client Devices. Instances in branches that are used in other roles must have a Current SUSE Linux Enterprise Server Subscription Offering.

SLE POS Client

All point of service Client Devices that are running a SUSE Linux Enterprise operating system, either deployed by the SLE POS solution or otherwise installed or deployed, must have a "SUSE Linux Enterprise Point of Service Client" Subscription Offering.

Client Devices are entitled to be used for running typical point of service applications or for supporting client applications (for example, a web browser). If the point of service application needs certain SUSE Linux Enterprise Server services to run, for example a local database, this is also covered by the SLE POS Client Subscription Offering.

Point of service Devices that are used as a combined point of service terminal and as a branch server, or point of service hardware used in any other server role, must have at least a SLE POS Branch Server Subscription Offering.

SLE POS Client Subscription Offerings must not be employed for any general purpose desktop or server use.

SLE POS High Availability Setup

SLE POS high availability servers can be set up as 2 Node high availability cluster. In that case separate Subscription Offerings of the SUSE Linux Enterprise High Availability Extension are needed for all Physical Servers used as cluster Nodes.

SLE POS Hardware Architectures

SLE POS administration and branch servers may be deployed on x86 or x86-64 SUSE certified hardware. SLE POS Client operating systems may only be built for the x86 Hardware Architecture.

SLE POS Virtualization

Provided that the restrictions mentioned above are complied with and all Instances belong to the same Point of Service solution, more than one virtual SUSE Linux Enterprise Point of Service Instance may be run on a single Physical Server that has a Current SLE POS Administration Server or SLE POS Branch Server Subscription Offering. For example, an operating system build server may be run as a Virtual Instance on the SLE POS Administration Server, or a SLE POS Branch Server can be run as a Virtual Instance on a combined point of service and SLE POS Branch Server Device. SLE POS Subscription Offerings must not be used as general purpose servers or Client Device virtualization.

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Appendix D – SUSE OpenStack Cloud

SUSE OpenStack Cloud Control Node plus SUSE OpenStack Cloud Administration/Deployer Server

The Unit of Measure is per Instance. This includes the control services needed to run a Private Cloud infrastructure on a single Physical Server. It also includes an installation framework that automates the installation and ongoing maintenance of the physical cloud infrastructure. At least one (1) SUSE OpenStack Cloud Control Node plus SUSE OpenStack Cloud Administration/Deployer Server is required for each SUSE OpenStack Cloud installation. SUSE OpenStack Cloud Control Nodes plus SUSE OpenStack Cloud Administration/Deployer Server include up to two (2) Subscription Offerings for SUSE Linux Enterprise Server for x86, & x86-64, Physical Deployment, and SUSE Linux Enterprise High Availability Extension to be used for the sole purpose of deploying the SUSE OpenStack Cloud Control Node and the SUSE OpenStack Cloud Administration/Deployer Server.

SUSE OpenStack Cloud Control Node

The Unit of Measure is per Instance. This is an additional Instance running the control services needed to run a Private Cloud infrastructure on a single Physical Server for reliability or increased performance. SUSE OpenStack Cloud Control Node includes one (1) Subscription Offering for SUSE Linux Enterprise Server for x86, & x86-64, Physical or Virtualized Deployment, and SUSE Linux Enterprise High Availability Extension which may be used for the sole purpose of deploying the SUSE OpenStack Cloud Control Node.

SUSE OpenStack Cloud Control Node for z/VM

The Unit of Measure is per Instance. This is an additional Instance running the control services needed to manage a Private Cloud IBM z/VM infrastructure on a single Physical Server for reliability or increased performance. The prerequisite for the Control Node for z/VM is at least one SUSE OpenStack Cloud Control Node plus a SUSE OpenStack Cloud Administration/Deployer Server Subscription Offering. A SUSE OpenStack Cloud Control Node includes one (1) Subscription Offering for SUSE Linux Enterprise Server for x86, & x86-64, Physical or Virtualized Deployment, and SUSE Linux Enterprise High Availability Extension which may be used for the sole purpose of deploying the SUSE OpenStack Cloud Control Node.

SUSE OpenStack Cloud Control Node for VMware

The Unit of Measure is per Instance. This is an additional Instance running the control services needed to manage a Private Cloud using VMware infrastructure on a single Physical Server for reliability or increased performance. The prerequisite for the Control Node for Stemware is at least one SUSE OpenStack Cloud Control Node plus a SUSE OpenStack Cloud Administration/Deployer Server Subscription Offering. A SUSE OpenStack Cloud Control Node includes one (1) Subscription Offering for SUSE Linux Enterprise Server for x86,& x86-64, Physical or Virtualized Deployment, and SUSE Linux Enterprise High Availability Extension which may be used for the sole purpose of deploying the SUSE OpenStack Cloud Control Node.

SUSE OpenStack Cloud Compute Node

The Unit of Measure is per 1-2 Sockets per Physical Server, Virtualized Deployment. This is the Physical Server or Virtual Instance that is managed by SUSE OpenStack Cloud to either host KVM or Xen Virtual Machines for workloads running in the Private Cloud or to integrate with VMware vCenter. SUSE OpenStack Cloud Compute Nodes require a separate Subscription Offering for SUSE Linux Enterprise Server for x86 & x86-64, Virtualized Deployment. If a SUSE OpenStack Cloud Compute Node is configured to be part of an optional SUSE Linux Enterprise High Availability cluster, the SUSE OpenStack Cloud Compute Node requires a separate Subscription Offering for SUSE Linux Enterprise High Availability.

SUSE OpenStack Cloud Swift Storage Node

The Unit of Measure is per 1-2 Sockets. This is the Physical Server managed by SUSE OpenStack Cloud that hosts the object storage using OpenStack Swift. A Current SUSE OpenStack Cloud Swift Storage Node Subscription Offering is required for each Physical Server that is part of the SUSE OpenStack Cloud Swift Storage Cluster. Each SUSE OpenStack Cloud Swift Storage Node requires a separate Subscription Offering for SUSE Linux Enterprise Server for x86, & x86-64, Physical Deployment.

SUSE OpenStack Cloud Monitoring

The Unit of Measure is per 1-2 Sockets per Physical Server, Virtualized Deployment. This is the Physical Server or Virtual Instance that is monitored by SUSE OpenStack Cloud Monitoring. This can include a SUSE OpenStack Compute or Control Node running in the SUSE OpenStack Cloud. SUSE OpenStack Cloud Monitored Compute Nodes and Control Nodes must provide the necessary SUSE Linux Enterprise Server Subscription Offerings as described in their detailed requirements above. The SUSE Linux Enterprise Server Subscription for the Monitored Control node is included with SUSE OpenStack Control Node.

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Appendix E – SUSE Manager

For SUSE Manager Lifecycle Management+ Subscription Offerings purchased after July 1st, 2021 the following rules apply:

SUSE Manager Subscription Offerings and Units of Measure

SUSE Manager Lifecycle Management+ Subscription Offering is an infrastructure management offering for SUSE Linux Enterprise Server and other selected non-SUSE operating systems and consists of entitlements for the SUSE Manager Server and SUSE Manager Proxy. SUSE Manager Server and SUSE Manager Proxy, along with their support entitlement will now be included with the new SUSE Manager Lifecycle Management+ Subscription Offerings subject to the terms below when the requirement of a minimum of 10 Subscription Offerings is met or a SUSE Manager Lifecycle Management+ Starter Pack (10) Subscription Offering is purchased. SUSE Manager Server and SUSE Manager Proxy will no longer be available as standalone Subscription Offerings.

SUSE Manager Server is available for installation on a Physical Server or as a Virtual Instance. A minimum of 10 Current SUSE Manager Lifecycle Management+ Subscription Offerings are required to receive support. To meet this requirement customers can purchase a SUSE Manager Lifecycle Management+ Starter Pack (10) Subscription Offerings available for 1-2 Sockets or 1-2 Virtual Machines, or 1-2 Sockets Unlimited Virtual Machines.

Optionally, You may purchase a minimum of 10 single SUSE Manager Lifecycle Management+, 1-2 Sockets or 1-2 Virtual Machines or a SUSE Manager Lifecycle Management+, 1-2 Sockets Unlimited Virtual Machines Subscription Offering.

Each Managed Instance requires a SUSE Manager Lifecycle Management+ Subscription Offering.

Each SUSE Manager Proxy is considered to be a Managed Instance and requires a SUSE Manager Lifecycle Management+ Subscription Offering. No additional workloads may be deployed on the same Instance that is running SUSE Manager Server or SUSE Manager Proxy.

Additional functionality can be added for each Managed Instance or the SUSE Manager Server itself with a SUSE Manager Monitoring Subscription Offering.

Additional Virtual Machine management functionality can be added for each managed Virtualization Host with a SUSE Manager Virtualization Management Subscription Offering.

SUSE Manager for Retail

At least one Retail Branch Server Subscription Offering is required for an installation.

Managed Instances connected to the SUSE Manager Server via the SUSE Manager for Retail Branch Server or the SUSE Manager for Retail Branch Server All-in-one, including the branch server and the point of service related workloads running on the branch server, do not require the SUSE Manager Lifecycle Management+ Subscription Offering.

Each Managed Instance connected directly to the SUSE Manager Server requires a SUSE Manager Lifecycle Management+ Subscription Offering.

You may only deploy POS Client Device Managed Instances running SLEPOS with Current Subscription Offerings in Your SUSE Manager for Retail environment.

Virtual Machine Management and Monitoring can be provided with the SUSE Manager for Retail Branch Server All-in-one Subscription Offering.

SUSE Manager Server

SUSE Manager Server is available for installation on a Physical Server or as a Virtual Instance. A minimum of ten Current SUSE Manager Lifecycle Management+ Subscription Offerings are required to receive support. The SUSE Manager Lifecycle Management+ Subscription Offering can only be used with SUSE Manager Server or SUSE Manager Proxy. To receive updates and patches for the SUSE Linux Enterprise Server components required to run the SUSE Manager Server You need a minimum of ten current Enterprise Linux Operating System Subscription Offerings such as SUSE Linux Enterprise Server, SUSE Liberty Linux or SUSE Linux Enterprise Server with Expanded Support. No additional workloads are permitted to be deployed on the same Instance that is running the SUSE Manager Server.

The SUSE Manager Server can be used with an unlimited number of Sockets per Physical Server or per Virtual Machine.

SUSE Manager Proxy

SUSE Manager Proxy is available for installation on a Physical Server or Virtual Instance or as a Container. Regardless of the deployment option chosen, the minimum of ten SUSE Manager Lifecycle Management+ Subscriptions Offerings has to be met to receive support. The SUSE Manager Lifecycle Management+ Subscription Offering can only be used with SUSE Manager Server or SUSE Manager Proxy. To receive updates and patches for the SUSE Linux Enterprise Server components required to run the SUSE Manager Proxy You need a minimum of ten current Enterprise Linux Operating System Subscription Offerings such as SUSE Linux Enterprise Server, SUSE Liberty Linux or SUSE Linux Enterprise Server with Expanded Support. No additional workloads are permitted to be deployed on the same Instance that is running the SUSE Manager Proxy. Unless used in the SUSE Manager for Retail environment, each SUSE Manager Proxy is considered a Managed Instance and requires a SUSE Manager Lifecycle Management+ Subscription Offering.



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When deployed as part of the SUSE Manager for Retail environment, each Instance of SUSE Manager Proxy requires a SUSE Manager for Retail Branch Server Subscription Offering or a SUSE Manager for Retail Branch Server All-in-one Subscription Offering. The SUSE Manager for Retail Branch Server Subscription Offering and the SUSE Manager for Retail Branch Server All-in-one Subscription Offering can only be used when the SUSE Manager Proxy is deployed as part of the SUSE Manager for Retail architecture, in typical point of service environments. No additional workloads may be deployed on the same Physical Server or Virtual Instance. However, where SUSE Manager Proxy is deployed with the SUSE Manager for Retail Branch Server Subscription Offering, workloads that are solely used to serve data and applications to Point of Service client devices can be deployed on the same Physical Server.

SUSE only provides support for SUSE Manager Proxy when deployed with SUSE Manager.

SUSE Manager High Availability Servers

SUSE Manager Server and SUSE Manager Proxy can be set up as a cluster of 2 Instances using the SUSE Linux Enterprise High Availability Extension. Terms and conditions are available on request.

Rules for Applying Subscription Offerings to Managed Instances

Physical Servers (except Arm AArch64)

SUSE Manager Lifecycle Management+, SUSE Manager Virtualization Management and SUSE Manager Monitoring Subscription Offerings need to be applied on Physical Servers based on the number of Sockets per Physical Server. Subscription Offerings for 1 to 2 Sockets can be aggregated to provide Current Subscription Offerings for Physical Servers with more than 2 Sockets. For example, a 6 Socket Physical Server must have 3 "SUSE Manager Lifecycle Management+ up to 2 Sockets or 2 Virtual Machines" Subscription Offerings.

SUSE Manager Lifecycle Management+ Subscription Offerings for the Managed Instances are not required with the purchase of SUSE Manager for Retail Branch Server Subscription Offerings or SUSE Manager for Retail Branch Server All-in-One Subscription Offerings.

SUSE Manager Lifecycle Management+ Subscription Offerings for the Managed Instances in a branch, are not required when the SUSE Manager for Retail Branch Server or the SUSE Manager for Retail Branch Server All-in-One Subscription Offerings have been rightfully acquired for that branch.

Physical Servers based on Arm AArch64 processors

Subscription Offerings for SUSE Manager Lifecycle Management for Arm need to be applied on Physical Servers based on the number of Sockets per Physical Server.

For Physical Servers with 16 or more Cores, the SUSE Manager Lifecycle Management+ for Arm Subscription Offering is based on 1-2 Sockets. For example, an Arm Physical Server with 16 Cores would require a single 1-2 Socket Unlimited Virtual Machine Subscription Offering.

Virtual Instances

SUSE Manager Lifecycle Management+, SUSE Manager Lifecycle Management+ Starter Pack (10) and SUSE Manager Monitoring each have two Subscription Offering options for Virtual Instances: You may choose a Subscription Offering either per 2 Virtual Instances or Unlimited Virtual Machines per Physical Server (as per preceding paragraph).

Per 2 Virtual Instances

The "SUSE Manager Lifecycle Management+ up to 2 Sockets or 2 Virtual Instances" Subscription Offerings and "SUSE Manager Monitoring up to 2 Sockets or 2 Virtual Machines" Subscription Offerings can be used to entitle 1 to 2 Virtual Machines

Unlimited Virtual Machines

SUSE Manager Lifecycle Management+ 1-2 Sockets with Unlimited Virtual Machines Subscription Offering include lifecycle management of the Virtualization Hosts and all Virtual Guest Operating Systems. SUSE Manager Monitoring 1-2 Sockets with Unlimited Virtual Machines Subscription Offering include monitoring of the Virtualization Hosts and all Virtual Guest Operating Systems .

Cloud Deployments for SUSE Manager Lifecycle Management+ and SUSE Manager Monitoring

Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines" may be repurposed as 1 Virtual Machine on any SUSE certified Cloud Services Provider authorized by SUSE (Bring Your Own Subscription or "BYOS").

Subscription Offerings for "1-2 Sockets with Unlimited Virtual Machines" may be repurposed as 3 Virtual Machines on any certified Cloud Services Provider authorized by SUSE (Bring Your Own Subscription or "BYOS").

For SUSE Manager Server, SUSE Manager Proxy and SUSE Manager Lifecycle Management Subscription Offerings pre July 1, 2021 the following rules apply:

SUSE Manager Subscription Offerings and Units of Measure

A SUSE Manager installation requires at least one SUSE Manager Server and for each Managed Instance a SUSE Manager Lifecycle Management Subscription Offering.



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SUSE Manager Server

SUSE Manager Server is available for installation on a Physical Server or as a Virtual Instance. At least one SUSE Manager Server Subscription Offering is required for an installation. No additional workloads are permitted to be deployed on the same Instance.

SUSE Manager Server Subscription Offering Options

For up to 50 Managed Instances (including Virtualization Hosts), the "SUSE Manager Server for up to 50 Managed Instances" Subscription Offering can be used. This Subscription Offering cannot be used for the SUSE Manager Server Master in a multilevel SUSE Manager Inter Server Sync setup (as described in the official "SUSE Manager Installation and Troubleshooting Guide" documentation, linked from https://www.suse.com/documentation). "SUSE Manager Server for up to 50 Managed Instances" Subscription Offering must not be used with an external database.

SUSE Manager Server Subscription Offering is not limited to 50 Managed Instances and can be used for the SUSE Manager Master Server in a multilevel SUSE Manager Inter Server Sync setup. The SUSE Manager Server Subscription Offering can either be used with the embedded database or an external Oracle database provided by You.

Both "SUSE Manager Server for up to 50 Managed Instances" and "SUSE Manager Server" Subscription Offerings can be used with an unlimited number of Sockets per Physical Server or per Virtual Machine.

SUSE Manager Proxy

SUSE Manager Proxy is available for installation on a Physical Server or Virtual Instance or as a Container. Regardless of the deployment option chosen, each Instance of SUSE Manager Proxy requires a SUSE Manager Proxy Subscription Offering, a SUSE Manager for Retail Branch Server Subscription Offering or a SUSE Manager for Retail Branch Server All-in-one Subscription Offering.

Rules for Applying Subscription Offerings to Managed Instances.

Physical Servers

Except for the Arm AArch64 processor-based servers, SUSE Manager Lifecycle Management, SUSE Manager Virtualization Management Subscription and SUSE Manager Monitoring Subscription Offerings need to be applied on Physical Servers based on the number of Sockets per Physical Server. Subscription Offerings for 1 to 2 Sockets can be aggregated to provide Current Subscription Offerings for Physical Servers with more than 2 Sockets. For example, a 6 Socket Physical Server must have 3 "SUSE Manager Lifecycle Management up to 2 Sockets or 2 Virtual Machines" Subscription Offerings.

SUSE Manager Lifecycle Management Subscription Offerings for the Managed Instances are not required with the purchase of SUSE Manager for Retail Branch Server Subscription Offerings.

SUSE Manager Lifecycle Management Subscription Offerings for the Managed Instances in a branch, are not required when the SUSE Manager for Retail Branch Server Subscription Offerings has been rightfully acquired for that branch.

Physical Servers based on Arm AArch64 processors

SUSE Manager Lifecycle Management for Arm need to be applied on Physical Servers based on the number of Cores or the number of Sockets per Physical Server.

For Physical Servers with less that 16 Arm Cores, the Subscription Offerings are based on groups of 4 Cores. These Subscription Offerings are stackable up to a total of 15 Cores per Physical Server. For example, an Arm Physical Server such as a Raspberry Pi with a total of 4 Cores would need a single, 4-Core group Subscription Offering. An Arm Physical Server with 12 Cores would require three 4-Core group Subscription Offerings. An Arm Physical Server with 15 Cores would require four 4-Core group Subscription Offerings.

For Physical Servers with 16 or more Cores, the SUSE Manager Lifecycle Management for Arm Subscription Offering is based on 1-2 Sockets. For example, an Arm Physical Server with 16 Cores would require a single 1-2 Socket Unlimited Virtual Machine Subscription Offering.

Virtual Instances

Two Subscription Offerings are available for SUSE Manager Lifecycle Management and SUSE Manager Monitoring for Virtual Instances: You may choose either (1) per 2 Virtual Instances or (2) Unlimited Virtual Machines per Physical Server (as per preceding paragraph).

Per 2 Virtual Instances

The "SUSE Manager Lifecycle Management up to 2 Sockets or 2 Virtual Instances" Subscription Offerings and "SUSE Manager Monitoring up to 2 Sockets or 2 Virtual Machines" Subscription Offerings can be used to entitle 1 to 2 Virtual Machines to Subscription Offering Benefits.

Unlimited Virtual Machines

SUSE Manager Lifecycle Management includes lifecycle management of the Virtualization Hosts and all Virtual Guest Operating Systems. SUSE Manager Monitoring includes monitoring of the Virtualization Hosts and all Virtual Machines.

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Appendix F – SUSE Enterprise Storage

SUSE Enterprise Storage Subscription Offerings and Units of Measure

SUSE Enterprise Storage ("SES") has two distinct deployment methods, each method comes with its own Subscription Offerings and units of measure. You cannot mix and match these two:

- For traditional storage – not deployed on Kubernetes -, the customer uses the SUSE Enterprise Storage Base and SUSE Enterprise Storage Expansion Subscription Offerings.
- For deployment on Kubernetes, the "SUSE Enterprise Storage deployed with Rook" Subscription Offerings must be used.

SES is deployed in a SES Storage Cluster of SES Nodes. Multiple SES Storage Clusters can be deployed.

SUSE Enterprise Storage Base ("SES Base")

To receive Subscription Offering benefits for SES Base, a Current SES Base Subscription Offering is required. A SES Base consists of SES OSD Nodes and SES Infrastructure Nodes.

Unit of Measure for SES OSD Nodes is 1-2 Sockets per Physical Server. Subscription Offerings are Stackable to match or exceed the number of Sockets and if necessary, the Socket count per Physical Server must be rounded up to match the next available SUSE Enterprise Storage Subscription Offering. For example, a Physical Server with 4 Sockets needs 2 Subscription Offerings for 1-2 Sockets.

Unit of Measure for SES Infrastructure Nodes is one (1) Instance of a SES Infrastructure Node running on a Physical Server or Virtual Machine.

A SUSE Enterprise Storage Subscription Offering is required for each SES Node deployed on a Physical Server or Virtual Machine as part of the SES Storage Cluster. You can use a combination of Physical Servers or Virtual Machines running SES OSD Nodes and SES Infrastructure Nodes with one SES Base Subscription Offering but shall under no circumstances exceed:

1. Up to four (4) Instances of 1-2 Socket Physical Servers for SES OSD Nodes and
2. Up to six (6) Instances for SES Infrastructure Nodes running on Physical Servers or Virtual Machines.

Of these Instances should one or more SES NFS Gateways or SES CIFS/Samba Gateways be chosen, such SES NFS Gateway or SES CIFS/Samba Gateway includes one (1) Subscription Offering for SUSE Linux Enterprise High Availability Extension for the sole purpose of deploying such SES NFS Gateway or SES CIFS/Samba Gateway within the SES Storage Cluster.

When infrastructure components (such as monitors, gateways and admin component) are collocated on SES OSD Nodes, this is counted as one of the six (6) Instances of available SES Infrastructure Nodes in the SES Base Subscription Offering, in addition to being counted as one of the OSD Node entitlements.

It is permissible to deploy multiple infrastructure components on an Infrastructure Node and this will only count as one single Infrastructure Node entitlement. By way of example, it is permissible to deploy a Rados Gateway, a Monitor and an iSCSI Gateway on a single Infrastructure Node and this will still only be counted as one of the six (6) Infrastructure Instances included in the SES Base Subscription Offering.

A SES Storage Cluster built with a SES Base Subscription Offering may only be expanded by adding one or more SES Expansion Subscription Offerings. Only one (1) SES Base Subscription Offering can be used in a SES Storage Cluster. A SES Base Subscription Offering includes up to ten (10) Subscription Offerings of SUSE Linux Enterprise Server x86-64 or AArch64 for 1-2 Sockets per Physical Server or Virtual Machine, for which the respective SES Base EULA limits scope of deployment to the sole purpose of deploying a SES Node within a SES Storage Cluster as defined above.

SUSE Enterprise Storage Expansion ("SES Expansion")

To receive Subscription Offering benefits for SES Expansion, a Current SES Expansion Subscription Offering is required.

A SES Expansion consists of one (1) SES OSD Node and one (1) SES Infrastructure Node.

Unit of Measure for a SES Expansion OSD Node is 1-2 Sockets per Physical Server. Subscription Offerings are Stackable to match or exceed the number of Sockets and if necessary, the Socket count per Physical Server must be rounded up to match the next available SES Expansion Subscription Offering. For example, a Physical Server with 4 Sockets needs two (2) Subscription Offerings for 1-2 Sockets.

Unit of Measure for SES Expansion Infrastructure Nodes is one (1) Instance of a SES Infrastructure Node running on a Physical Server or Virtual Machine. If this Instance is deployed as a SES NFS Gateway or SES CIFS/Samba Gateway, such SES NFS Gateway or SES CIFS/Samba Gateway includes one (1) Subscription Offering for SUSE Linux Enterprise High Availability Extension for the sole purpose of deploying such SES NFS Gateway or SES CIFS/Samba Gateway within the SES Storage Cluster.

When infrastructure components (such as monitors, gateways and admin component) are collocated on a SES OSD Expansion Node, this is counted as a single Infrastructure Node entitlement in addition to being counted as one of the OSD Node entitlements.

It is permissible to deploy multiple infrastructure components on an Infrastructure Node and this will only be counted as a single Infrastructure Node entitlement. By way of example, it is permissible to deploy multiple gateways on a single Infrastructure Expansion Node. This uses up the respective Infrastructure Node expansion entitlement.

The SES Expansion Subscription Offering includes up to two (2) Subscription Offerings for SUSE Linux Enterprise Server for x86-64 or AArch64 for 1-2 Sockets or 1-2 Virtual Machines (such Virtual Machines are deployable only for SES Expansion Infrastructure Nodes).

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The SES Expansion Node EULA limits the scope of deployment of the SUSE Linux Enterprise Server to the sole purpose of deploying a SES Node within a SES Storage Cluster as defined above.

SUSE Enterprise Storage deployed with Rook

Unit of Measure for SUSE Enterprise Storage deployed with Rook is the number of OSD drives used. A single Subscription Offerings includes up to 12 OSDs. Subscription Offerings are counted for each individual cluster and are Stackable to match or exceed the number of OSDs used. For example, a storage cluster with 40 OSDs, needs 4 Subscription Offerings for SUSE Enterprise Storage for Rook. A Subscription Offering for SUSE Enterprise Storage for Rook can only be used within a single cluster.

This Subscription Offering is only applicable for a Kubernetes cluster running SUSE Enterprise Storage. The Kubernetes Subscription Offering must be purchased separately and is not included in the SUSE Enterprise Storage for Rook Subscription Offering. SUSE Enterprise Storage deployed with Rook is only supported if all nodes of the Kubernetes cluster have current Subscription Offerings for the operating system and for Kubernetes – for example SUSE CaaS Platform or other SUSE supported Kubernetes distributions.



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Appendix G – SUSE Linux Enterprise Desktop

Operating Environments and Units of Measure for SUSE Linux Enterprise Desktop

Units of Measure do not differentiate between single core or multi-core or simultaneous multi-threading capable Processors.

SUSE Linux Enterprise Desktop for Intel or AMD Processors ("x86" or "x86-64"), Physical Deployment

For a Device with 32-bit or 64-bit Processors, the number of required Subscription Offerings must match or exceed the number of Devices, where SUSE Linux Enterprise Desktop is deployed, installed, used or executed. The Subscription Offering must be either Basic or a mix of Standard or Priority. Virtualized Deployment of SUSE Linux Enterprise Desktop is not permitted with this Subscription Offering. One Subscription Offering cannot be used to entitle more than one Device.

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Appendix H – SUSE CaaS Platform

Operating Environments and Units of Measure

Each Physical Server, Virtualization Host or Virtualization Environment on which SUSE CaaS Platform is deployed, installed, used or executed must have a Subscription Offering.

Units of Measure do not differentiate between single core, multi-core or simultaneous multi-threading capable Processors.

For Virtualization Environments, if the Unit of Measure chosen is per number of Sockets with Unlimited Virtual Machines per Physical Server, only Physical Servers for which the appropriate Subscription Offering has been acquired may be used to deploy such Virtualization Environment, irrespective of whether such Physical Server is actually used or for how long such Physical Server is used.

To change the deployment type of a Product during the Subscription Offering period, You must choose the highest valued Subscription Offering matching Your different deployment types for this Product. For example, if You deploy the higher valued SUSE CaaS Platform Subscription Offering for '1-2 Sockets with Unlimited Virtual Machines' during the Subscription Offering period for a deployment scenario matching a lower valued (when compared to the 1-2 Sockets with Unlimited Virtual Machines Subscription Offering) '1-2 Sockets or 1 Virtual Machine', You may continue to use the higher valued Subscription Offering for the remaining subscription period. However, You may not deploy the lower valued SUSE CaaS Platform Subscription Offering for '1-2 Sockets or 1 Virtual Machines' during the Subscription Offering period for a deployment type matching the higher valued '1-2 Sockets with Unlimited Virtual Machines' Subscription Offering.

Subscription Offerings for 1-2 Sockets or 1 Virtual Machine

These Subscription Offerings are intended for flexible deployments on Physical Servers and low-density or cloud virtualization. The Unit of Measure for SUSE CaaS Platform is per 1-2 Sockets per Physical Server or 1 Virtual Machine. SUSE CaaS Platform is provided with Priority Subscription Offerings only.

Each Physical Server or Virtual Environment on which SUSE CaaS Platform is deployed, installed, used or executed must have a Current Subscription Offering. SUSE CaaS Platform Subscription Offerings are Stackable to match or exceed the number of Sockets and if necessary, the Socket count per Physical Server must be rounded up to match the next available SUSE CaaS Platform Subscription Offering. For example, a Physical Server with 4 Sockets needs 2 Subscription Offerings for 1-2 Sockets. A Subscription Offering for SUSE Linux Enterprise Server must not be used as a Subscription Offering for SUSE CaaS Platform. However, a Subscription Offering for SUSE CaaS Platform can alternatively (but not concurrently) be used as a SUSE Linux Enterprise Server Subscription Offering.

The SUSE CaaS Platform Migration Subscription Offering is compatible only with SUSE Linux Enterprise Server x86-64 Unlimited Virtualization Priority Subscription Offerings. Any other SUSE Linux Enterprise Server Subscription Offering must first be upgraded accordingly before SUSE CaaS Platform Migration Subscription Offerings can be acquired.

SUSE CaaS Platform for 1-2 Sockets or 1 Virtual Machines does not include support for any Hypervisor. Deployments of SUSE CaaS Platform in a Virtualization Environment require a SUSE Linux Enterprise Server, x86-64, 1-2 Sockets with Unlimited Virtual Machines Subscription Offering. SUSE CaaS Platform may also be deployed on third party virtualization solutions or as a single Virtual Machine on a public cloud.

Subscription Offerings for 1-2 Sockets with Unlimited Virtual Machines

For high-density Virtualized Deployment a Subscription Offering for '1-2 Sockets with Unlimited Virtual Machines' is available. This Subscription Offering entitles You to deploy an unlimited number of Virtual Machines per 1-2 Sockets on a Virtualization Host. These Virtual Machines can be either SUSE CaaS Platform or SUSE Linux Enterprise Server for x86-64. For Virtualization Hosts with more than 2 Sockets, Subscription Offerings are Stackable to match or exceed the number of Sockets. This Subscription Offering can be used on any third-party Virtualization Host and also includes the entitlement to run SUSE Linux Enterprise for x86-64 Xen or KVM as the Virtualization Host.

Subscription Offerings for "1-2 Sockets with Unlimited Virtual Machines" may be deployed alternatively (but not concurrently) as 1 Virtual Machines on any Virtualization Host or with any cloud services provider which is authorized by SUSE (Bring Your Own Subscription or "BYOS"). Unlike Subscription Offerings for "1-2 Sockets or 1 Virtual Machines" ("Low-Density"), Subscription offerings for 1-2 Sockets with Unlimited Virtual Machines must be acquired for each Virtualization Host capable of deploying SUSE Products within a Virtualization Environment.

The SUSE CaaS Platform Migration Subscription Offering is compatible only with SUSE Linux Enterprise Server x86-64 Unlimited Virtualization Priority Subscription Offerings. Any other SUSE Linux Enterprise Server Subscription Offering must first be upgraded accordingly before SUSE CaaS Platform Migration Subscription Offerings can be acquired.

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Appendix I – SUSE Cloud Application Platform

Operating Environments and Units of Measure

The Unit of Measure for SUSE Cloud Application Platform ("SUSE CAP") is per 1 Core or 2 vCPUs. Each Physical Server or Virtual Machine on which SUSE CAP Container Workloads are deployed, installed, used or executed must have a Current SUSE CAP Subscription Offering.

SUSE CAP Subscription Offerings are Stackable to match or exceed the number of Cores or vCPUs (rounding up to an even number if counting vCPUs).

For Physical Servers, Cores are the unit of measure. For example, a Physical Server with 16 Cores needs 16 Subscription Offerings for '1 Core or 2 vCPUs'.

For Virtual Machine and Cloud deployments where the number of Physical Cores cannot be counted directly, vCPU pairs as reported by the hypervisor or cloud provider are counted instead. For example, an AWS m4.4xlarge instance type with 16 vCPUs requires 8 Subscription Offerings of '1 Core or 2 vCPUs'.

Subscriptions with Infrastructure

SUSE CAP Subscription Offerings are available with or without supporting infrastructure entitlements. A "SUSE CAP (with Infrastructure)" Subscription Offering entitles You to use:

(i) SUSE CaaS Platform Kubernetes Worker Nodes, which are counted towards the SUSE CAP Units of Measure.

(ii) SUSE CaaS Platform Kubernetes Master Nodes solely to deploy and execute SUSE CAP Container Workloads, which are not counted towards the SUSE CAP Units of Measure.

For example, the following cluster would require 72 Subscription Offerings for '1 Core or 2 vCPUs':

9 SUSE CaaS Platform Worker nodes with 16 vCPUs each running SUSE Cloud Application Platform (9x8 Subscription Offerings for '1 Core or 2 vCPUs' are counted)

3 SUSE CaaS Platform Master nodes with 4 vCPUs each (Subscription Offerings are not counted)

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Appendix J – Long Term Service Pack Support

Long Term Service Pack Support Subscription Offerings and Units of Measure

Long Term Service Pack Support ("LTSS") Subscription Offering extends the support period of a SLES (x86, x86-64, s390x, ppc64, ppc64le) Service Pack and/or SLES for SAP Applications (x86-64) Service Pack as defined at https://www.suse.com/lifecycle/.

LTSS Subscription Offering is available as an additional offering for SLES (x86, x86-64, s390x, ppc64, ppc64le).

For SLES for SAP Application (x86-64, ppc64le) LTSS Subscription Offering is available to extend the Subscription Offering benefit period after expiration of Extended Service Pack Overlap Support (ESPOS).

SLES for High Performance Computing Long Term Service Pack Support (SLE HPC LTSS) (x86-64, AArch64) Subscription Offering is available to extend the Subscription Offering benefit period after expiration of Extended Service Pack Overlap Support (SLE HPC ESPOS), or to extend the SLE HPC Subscription Offering benefit period.

All LTSS Subscription Offerings require a matching and underlying (i) Current SUSE Linux Enterprise Server Subscription Offering or (ii) Current SLES for SAP Application (x86-64) Subscription Offering or (iii) SLE HPC (x86-64, Aarch64) Subscription Offering. Your LTSS Subscription Offering must be registered at SUSE Customer Center (SCC), and you may be required to install the latest LTSS updates.

LTSS for x86 & x86-64 for "up to 100 Instances", "up to 500 Instances" and "unlimited Instances"

LTSS for x86 & x86-64 has the following Subscription Offering options:

- up to 100 Instances
- up to 500 Instances
- unlimited Instances

This LTSS Subscription Offering is offered strictly per Code Stream and is Hardware Architecture specific.

Reactive LTSS for x86 and x86-64 for "up to 100 Instances", "up to 500 Instances" and "unlimited Instances"

Reactive LTSS for x86 & x86-64 has the following Subscription Offering options:

- up to 100 Instances
- up to 500 Instances
- unlimited Instances

This Reactive LTSS Subscription Offering is offered strictly per Code Stream and is Hardware Architecture specific.

LTSS for x86 & x86-64, 1-2 Sockets with Inherited Virtualization per Code Stream

This Subscription Offering entitles You to any current LTSS version and is not hardware architecture specific. One LTSS Subscription Offering is required per 1-2 Sockets. For Physical Servers with more than 2 Sockets, Subscription Offerings are Stackable to match or exceed the number of Sockets. Virtualization is inherited from the underlying SLES Subscription Offering.

By way of example, a Physical Server with 4 Sockets needs 2 Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines." Six Virtual Machines of the same Code Stream of SLES under LTSS on a SLES Virtualization Host with four Sockets require two SLES Subscription Offerings for 1-2 Sockets with Unlimited Virtual Machines (for the host and VMs) and two LTSS Subscription Offerings of 1-2 Sockets (for the host and VMs).

As a second example, running three Virtual Machines with different Code Streams on the same four-socket SLES Virtualization Host requires two SLES Subscription Offerings for 1-2 Sockets with Unlimited Virtual Machines (for the host) and three LTSS Subscription Offerings (one for each Code Stream executed as VM guest).

LTSS for SLES for z Systems (s390x)

LTSS for SLES for z Systems has the following Subscription Offerings:

- up to 5 IFLs
- up to 10 IFLs
- unlimited IFLs

LTSS for SLES for POWER (ppc64) 1-2 Sockets with Inherited Virtualization per Code Stream

This Subscription Offering entitles You to any current LTSS version for ppc64.

One LTSS Subscription Offering is required per 1 - 2 Sockets. For Physical Servers with more than 2 Sockets, Subscription Offerings are Stackable to match or exceed the number of Sockets. Virtualization is inherited from the underlying SLES Subscription Offering.

By way of example, a Physical Server with 4 Sockets needs 2 Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines". As another example, running two Virtual Machines with different Code Streams on a SLES Virtualization Host with 2 Sockets requires:

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- One SUSE Linux Enterprise Server Subscription Offerings for 1-2 Sockets with Unlimited Virtual Machines (for the Virtualization Host) and
- Two LTSS Subscription Offerings (one for each Code Stream)

SUSE Linux Enterprise for High Performance Computing Long Term Service Pack Support ("SLE HPC LTSS") (x86-64, AArch64) 1-2 Sockets with Inherited Virtualization per Code Stream

This Subscription Offering entitles You to any Current LTSS version for SUSE Linux Enterprise for High Performance Computing x86-64, AArch64.

One SLE HPC LTSS Subscription Offering is required per 1 - 2 Sockets per Code Stream. For Physical Servers with more than 2 Sockets, Subscription Offerings are Stackable to match or exceed the number of Sockets. Virtualization is inherited from the underlying SLES Subscription Offering.

By way of example, a Physical Server with 4 Sockets needs 2 Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines". As another example, running two Virtual Machines with different Code Streams on a SLES Virtualization Host with 2 Sockets requires:

- One SUSE Linux Enterprise for High Performance Computing Subscription Offerings for 1-2 Sockets or 1-2 Virtual Machine and
- Two SLE HPC LTSS Subscription Offerings (one for each Code Stream)

Extended Service Pack Overlap Support (SLE HPC ESPOS) for SUSE Linux Enterprise for High Performance Computing (SLES for HPC)

The SLE HPC ESPOS (x86-64, AArch64) extends the Subscription Offering benefit period for a particular SLE HPC (x86-64, AArch64) Service Pack. SLE HPC ESPOS entitles You to continue receiving SLE HPC ESPOS (x86-64, AArch64) Subscription Offering benefits under the same conditions as SLE HPC LTSS (per Code Stream and per Hardware Architecture) according the SUSE product lifecycle.

Extended Service Pack Overlap Support (ESPOS) for SLES for SAP Applications

The SLES for SAP Applications (x86-64, ppc64le) Subscription Offering includes ESPOS. ESPOS extends the Subscription Offering benefit period for a particular SLES for SAP Applications (x86-64, ppc64le) Service Pack. ESPOS entitles customers of SLES for SAP Applications (x86-64, ppc64le) to continue receiving Subscription Offering benefits under the same conditions as LTSS (i.e. per Code Stream and Hardware Architecture dependent) according to the SUSE product lifecycle.



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Appendix K – SUSE Linux Enterprise for High Performance Computing

SUSE Linux Enterprise for High Performance Computing and SUSE Linux Enterprise for High Performance Computing ESPOS ("SLE HPC ESPOS")

The Unit of Measure for a SUSE Linux Enterprise for High Performance Computing ("SLE HPC") Subscription Offering is per 1 - 2 Sockets or 1-2 Virtual Machine per Physical Server used as part of a SLE HPC Cluster. One Subscription Offering is required for a 1 - 2 Socket Physical Server. For Physical Servers with more than 2 Sockets, the number of Subscription Offerings must match or exceed the total number of pairs of Sockets of the Physical Server.

All SLE HPC Nodes within a SLE HPC Cluster must deploy the same SUSE Linux Enterprise Subscription Offering such as (a) "Standard" with SUSE Linux Enterprise for High Performance Computing ESPOS ("SLE HPC ESPOS") or without ESPOS or (b) "Priority" with ESPOS or without ESPOS. When You acquire a LTSS Subscription Offering for one node in a particular SLE HPC Cluster, You must acquire sufficient Subscription Offerings in the applicable Unit to cover all acquired, installed, or deployed SLE HPC Nodes in that particular cluster.

The amount of Subscription Offerings for a particular SLE HPC Cluster must match or exceed the sum of Subscription Offerings of all Socket Pairs present in the SLE HPC Cluster.

For Physical Servers with more than 2 Virtual Machines, HPC Subscription Offerings are Stackable to match or exceed the number of Virtual Machines. For example, a Physical Server with 2 Sockets and 4 Virtual Machines needs 2 HPC Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines."

A SLE HPC Cluster is defined by the following cumulative characteristics:

- One SLE HPC Cluster must consist of a minimum of four (4) Physical Nodes; and
- The SLE HPC Cluster is solely used for compute-intensive or high-performance data analysis distributed tasks sent to individual SLE HPC Compute Nodes within the SLE HPC Cluster (see "Definitions" for more details); and
- External network communication to and from the SLE HPC Cluster must only happen via the SLE HPC Head Nodes. With the exception of (a) communication for purely administrative purposes which in no way interferes with the computation task distributed to any HPC Compute Node and (b) data transfer directly related to computation of a particular computation task between any HPC Compute Node and a storage system or streaming data source. No direct or indirect communication between HPC Compute Nodes and external systems is allowed; and
- The ratio of SLE HPC Head Nodes to SLE HPC Compute Nodes must not exceed a ratio of 1 to 4.



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Appendix L – SUSE Linux Enterprise Micro

SUSE Linux Enterprise Micro Subscription Offerings and Units of Measure

Effective April 1st 2021 for SUSE Linux Enterprise Micro on x86-64 and AArch64.

Operating Environments and Unit of Measure

Each Physical Server, Virtualization Host or Virtualization Environment on which SUSE Linux Enterprise Micro is deployed, installed, used or executed must have a Subscription Offering. A SUSE Linux Enterprise Micro Subscription Offering must not be used as Subscription Offering for SUSE Linux Enterprise Server or SUSE Linux Enterprise Server for SAP Applications.

SUSE Linux Enterprise Micro is designed for use cases that move the data processing away from centralized processing in data centers or cloud environments over to decentralized computing at the data collecting devices (edge). For centralized deployments as in traditional data center deployments, SUSE Linux Enterprise Micro may be used as a container host OS or as a hypervisor to run SUSE Linux Enterprise Server Virtual Machines. To use SUSE Linux Enterprise Micro as a hypervisor in a datacenter, customers require a Subscription Offering for SUSE Linux Enterprise Server with Unlimited Virtual Machines ("1-2 Sockets with Unlimited Virtual Machines"). The Subscription Offering for SUSE Linux Enterprise Server with Unlimited Virtual Machines includes entitlements for SUSE Linux Enterprise Micro as a hypervisor.

For example, a 2 socket system with a total of 96 cores using SUSE Linux Enterprise Micro as a KVM hypervisor to run 25 SUSE Linux Enterprise server Virtual Machines will consume one subscription offering for SUSE Linux Enterprise Server 1-2 Sockets with Unlimited Virtual Machines in total and cover the SUSE Linux Enterprise Micro hypervisor and the SUSE Linux Enterprise Server virtual machines. An additional subscription offering for SUSE Linux Enterprise Micro is not required.

Subscription Offerings for 1-16 Virtual Cores

These Subscription Offerings are intended for flexible deployments on Physical Servers, Virtualization Environments and in Public Clouds.

Deployment on Physical Servers

The number of Subscription Offerings needed for a Physical Server is determined by the number of Virtual Cores the Physical Server exposes to SUSE Linux Enterprise Micro.

Physical Servers with up to 16 Virtual Cores need 1 Subscription Offering for "1-16 vCores".

For Physical Servers with more than 16 Virtual Cores, Subscription Offerings are Stackable to match or exceed the number of Virtual Cores. For example, a Physical Server with 48 Virtual Cores needs 3 Subscription Offerings for "1-16 vCores". As another example, a single-socket 24-core server would require two subscription offerings for SUSE Linux Enterprise Micro for 1-16 vCores.

Subscription Offerings can be transferred to new and/or different Physical Servers. For example, when 10 Physical Servers with 16 Virtual Cores each are replaced by 4 Physical Servers with 64 Virtual Cores each, the 10 "1-16 vCores" Subscription Offerings can be transferred to the new Physical Servers. In this example, each of the new servers requires 4 Subscription Offerings for "1-16 vCores". The total number of Subscription Offerings needs to be 16. 10 Subscription Offerings are transferred, and another 6 Subscription Offerings need to be added.

Deployments as Virtual Machines

Subscription Offerings for "1-16 vCores" can also be repurposed as Virtual Machines on any Virtualization Host or Virtualization Environment.

For Virtual Machines with more than 16 Virtual Cores, Subscription Offerings are Stackable to match or exceed the number of Virtual Cores. For example, a Virtual Machine with 48 Virtual Cores needs 3 Subscription Offerings for "1-16 vCores".

Deployments in the Cloud

Subscription Offerings for "1-16 vCores" can also be repurposed as Virtual Machines on any SUSE certified Cloud Services Provider (CSP).

As a special exception, for use with any SUSE certified Cloud Service Provider (CSP), a single Subscription Offering for "1-16 vCores" is required per Virtual Machine, and the Virtual Machine is limited to a maximum of 16 Virtual Cores. SUSE Linux Enterprise Micro must not be used for Virtual Machines with more than 16 Virtual Cores with any SUSE certified CSP.

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Appendix M – SUSE Rancher Subscription Offerings

SUSE Rancher Subscription Offerings and Units of Measure

A SUSE Rancher installation requires at least one SUSE Rancher Server and for each SUSE Rancher Node either a SUSE Rancher Node or SUSE Rancher Cloud Kubernetes Node Subscription Offering (see below). SUSE Rancher Subscription Offerings are available for installation on a Physical Server, as a Virtual Instance or as a Hosted service.

SUSE Rancher Management Server Subscription Offering

At least one SUSE Rancher Management Server Subscription Offering is required for an installation. No additional workloads are permitted to be deployed on the same Instance. For installations running on a Physical Server or as a Virtual Instance, "SUSE Rancher Management Server" Subscription Offerings can be used with an unlimited number of Sockets per Physical Server or per Virtual Machine. SUSE Rancher Management Server requires and is installed as a workload on an underlying Kubernetes cluster. Each SUSE Rancher Management Server Subscription Offering may be deployed on up to 7 Nodes which are part of a single Kubernetes cluster. Each SUSE Rancher Management Server Subscription Offering includes a support entitlement for up to 7 Instances of the Rancher Kubernetes Engine (RKE), solely for the support of the SUSE Rancher Management Server.

SUSE Rancher Hosted Management Server Subscription Offering

SUSE Rancher Hosted Management Server Subscription Offerings require SUSE Rancher Management Server as an underlying Subscription Offering. For installations requiring up to 500 Rancher Nodes, the SUSE Rancher Hosted Management Server [up to 500] Subscription Offering may be used. The Subscription Offering for SUSE Rancher Hosted Management Server [>500] has no limitation in number of Rancher Nodes.

SUSE Rancher Additional Management Server Subscription Offering

If You require more than one Instance of SUSE Rancher Management Server, You may purchase one or more SUSE Rancher Additional Management Server Subscription Offerings. Each SUSE Rancher Additional Management Server Subscription Offering requires You to first purchase at least one "SUSE Rancher Management Server" Subscription Offering. Each SUSE Rancher Management Additional Server Subscription Offering has the same entitlements as a SUSE Rancher Management Server Subscription Offering.

SUSE Rancher Node Subscription Offering

SUSE Rancher Node Subscription Offerings first require a SUSE Rancher Management Server Subscription Offering. For installations running on a Physical Server or as a Virtual Instance, SUSE Rancher Node Subscription Offerings can be used with an unlimited number of Sockets per Physical Server or vCPUs per Virtual Machine. SUSE Rancher Node Subscription Offerings do not include any entitlements for support of the underlying operating system A list of supported operating systems may be found in the SUSE Rancher support matrix.

Cloud Kubernetes Node Subscription Offering

Cloud Kubernetes Node Subscription Offerings are intended for use on managed Cloud Kubernetes Clusters. However, this excludes running RKE/k3s/RKE2 on IaaS Virtual Machines. Cloud Kubernetes Node Subscription Offerings first require a SUSE Rancher Management Server Subscription Offering. For installations running on a Physical Server or as a Virtual Instance, a Cloud Kubernetes Node Subscription Offering is required for each Node configured in a Public Cloud provided Kubernetes cluster. Cloud Kubernetes Node Subscription Offerings do not include any entitlements for support of the underlying operating system. A list of supported operating systems may be found in the SUSE Rancher support matrix.

Longhorn Subscription Offering

The Longhorn Subscription Offering is an addon which requires a Current SUSE Rancher Node or Cloud Kubernetes Node Subscription Offering. An example complete Longhorn deployment could consist of Subscription Offerings for SUSE Rancher Management Server, 20 SUSE Rancher Nodes and 20 Longhorn Nodes.

Harvester

Harvester is an addon Subscription Offering which requires a current Rancher Management Server Subscription Offering.

The Harvester Subscription Offering is based on the total aggregate number of Cores of the Clusters that it runs on. Harvester Subscription Offerings are available in grouped units of 32 Cores.

Subscription Offerings are Stackable to match or exceed the number of Cores and if necessary, the Core count per Cluster must be rounded up to match the next available Harvester Subscription Offering.

Any Rancher Nodes that access the embedded Longhorn storage inside the Harvester Cluster using the container storage interface passthrough require a current Longhorn Subscription Offering.

For example, a three-host Harvester Cluster with 32 Cores in each Physical Server which has 20 Rancher Nodes on top would require:

3 Subscription Offerings for Harvester, 32 Cores

20 Subscription Offerings for SUSE Rancher Nodes

20 Subscription Offerings for the Longhorn Nodes

1 Subscription Offering for Rancher Management Server.



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Appendix N

SUSE Linux Enterprise Real Time

Operating Environments and Unit of Measure

SUSE Linux Enterprise Real Time is available on x86-64. Each Physical Server, Virtualization Host or Virtualization Environment on which SUSE Linux Enterprise Real Time is deployed, installed, used or executed must have a Subscription Offering.

For Virtualization Environments, if the Unit of Measure chosen is per number of Sockets with Unlimited Virtual Machines per Physical Server, only Physical Servers for which the appropriate Subscription Offering has been acquired may be used to deploy such Virtualization Environment, irrespective of whether such Physical Server is actually used or for how long such Physical Server is used.

To change the deployment type of a Product during the Subscription Offering period, You must choose the highest valued Subscription Offering matching Your different deployment types for this Product. For example, if You deploy the higher valued SUSE Linux Enterprise Real Time Subscription Offering for '1-2 Sockets with Unlimited Virtual Machines' during the Subscription Offering period for a deployment scenario matching a lower valued (when compared to the 1-2 Sockets with Unlimited Virtual Machines Subscription Offering) '1-2 Sockets or 1-2 Virtual Machines', You may continue to use the higher valued Subscription Offering for the remaining Subscription Offering period. However, You may not deploy the lower valued SUSE Linux Enterprise Real Time Subscription Offering for '1-2 Sockets or 1-2 Virtual Machines' during the Subscription Offering period for a deployment type matching the higher valued '1-2 Sockets with Unlimited Virtual Machines' Subscription Offering.

Subscription Offerings for 1-2 Sockets or 1-2 Virtual Machines

These Subscription Offerings are intended for flexible deployments on Physical Servers and low-density or cloud virtualization.

Deployment on Physical Servers

The number of Subscription Offerings needed for a Physical Server is determined by the number of Sockets in the Physical Server.

Physical Servers with 1-2 Sockets need 1 Subscription Offering for "1-2 Sockets or 1-2 Virtual Machines."

For Physical Servers with more than 2 Sockets, Subscription Offerings are Stackable to match or exceed the number of Sockets. For example, a Physical Server with 4 Sockets needs 2 Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines."

Subscription Offerings can be transferred to new and/or different Physical Servers. For example, when 10 Physical Servers with 2 Sockets each are replaced by 4 Physical Servers with 4 Sockets each, the 10 "1-2 Sockets or 1-2 Virtual Machines" Subscription Offerings can be transferred to the new Physical Servers. In this example, a total of 8 Subscription Offerings (2 per Physical Server with 4 Sockets) are transferred to the new Physical Servers. You can use the remaining 2 Subscription Offerings for later deployments.

Low-Density or Cloud Deployments

Up to 2 Virtual Machines running on the same Virtualization Host or Virtualization Environment or within the same Private Cloud account or Public Cloud zone can be deployed with one "1-2 Sockets or 1-2 Virtual Machines" Subscription Offering.

Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines" can also be repurposed as Virtual Machines on any Virtualization Host, Virtualization Environment or with any SUSE certified Cloud Services Provider (CSP).

At any point in time, a Subscription Offering for "1-2 Sockets or 1-2 Virtual Machines" can only be deployed either on a Physical Server or as Virtual Machines. For clarity, a Subscription Offering for "1-2 Sockets or 1-2 Virtual Machines" cannot be used for 1 Socket on a Physical Server and 1 Virtual Machine.

Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines" may not be used as a Virtualization Host. Virtualization Host capability is provided pursuant to the Subscriptions for 1-2 Sockets with Unlimited Virtual Machine defined below.

Subscription Offerings for 1-2 Sockets with Unlimited Virtual Machines

For high-density Virtualized Deployment a Subscription Offering for "1-2 Sockets with Unlimited Virtual Machines." is available. This Subscription Offering entitles You to deploy an unlimited number of Virtual Machines per 1-2 Sockets on a Virtualization Host. For Virtualization Hosts with more than 2 Sockets, Subscription Offerings are Stackable to match or exceed the number of Sockets. This Subscription Offering can be used on any third-party Virtualization Host and also includes the entitlement to run SUSE Linux Enterprise for x86-64 Xen or KVM as the Virtualization Host.

Subscription Offerings for "1-2 Sockets with Unlimited Virtual Machines" may be deployed alternatively (but not concurrently) as 1 or 2 Virtual Machines on any Virtualization Host or with any Cloud Services provider which is authorized by SUSE (Bring Your Own Subscription or "BYOS"). Unlike Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines" ("Low-Density"), Subscription offerings for 1-2 Sockets with Unlimited Virtual Machines must be acquired for each Virtualization Host capable of deploying SUSE Products within a Virtualization Environment.

Effective July 1st 2021 for SUSE Linux Enterprise Real Time

Starting July 1st, 2021, the Subscription Offering for SUSE Linux Enterprise Real Time with Live Patching, 1-2 Sockets with Unlimited Virtual Machines will replace the existing Subscription Offering for SUSE Linux Enterprise Real Time, 1-2 Sockets with Unlimited Virtual Machines. This has no effect on Subscription Offerings for these products acquired before this date.

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Both Standard and Priority Subscription Offerings for SUSE Linux Enterprise Server Real Time with Live Patching, 1-2 Sockets with Unlimited Virtual Machines will include SUSE Linux Enterprise Live Patching.

SUSE Linux Enterprise Live Patching must be purchased separately for SUSE Linux Enterprise Server Real Time Subscription Offerings for 1-2 Sockets or 1-2 Virtual Machines.

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Glossary

"Academic Institution" means an educational institute as stated on https://www.suse.com/licensing/academic/qualify/.

"Academic Use" means the benefiting from a Subscription Offering by an Academic Institution.

"Client" is the client part of a client-server application.

"Client Device" is the client device of a solution with client and server device, e.g., SUSE Linux Enterprise Point of Service and SUSE Manager for Retail product family.

"Client Server Application" is an application whose design requires two or more parts to fulfill the dedicated purpose: one or more clients and one or more servers acting together.

"Cloud Computing" means a paradigm for enabling network access to a scalable and elastic pool of shareable physical or virtual resources with self-service provisioning and administration on-demand.

"Cloud Kubernetes Cluster" means a Kubernetes cluster that has a third party managing the Kubernetes API and etcd Instances associated with the cluster such as (by way of example) EKS and AKS clusters,

"Cloud Services" means one or more capabilities offered via Cloud Computing invoked using a defined interface.

"Core" means a subunit within a CPU on a single chip that handles the main computational activities of a computer. A CPU may have one or more Cores and therefore be a "Multi-Core CPU" if it has more than one Core.

"Code Stream" is a released version of SLES such as GA (initial release) or a particular Service Pack; each is defined to be a different Code Stream.

"Container" or **"Linux Containers"** are isolated Linux systems (processes or groups of processes) which share a single Linux kernel.

"Container Workloads" are processes running in Linux Containers on a scheduler such as Kubernetes, launched from OCI images.

"CP" means an activated Central Processor and is an IBM mainframe general processor unit for general purpose processing. CPs are also capable of running Linux. Spare CPs are not regarded as "activated CPs." CPs which are exclusively dedicated to another LPAR (Logical Partition) are not regarded as activated CPs. Shared CPs are regarded as activated CPs.

"CPU" means "Central Processing Unit" and is the functional unit (i.e., the "computing part") of the computer that interprets and executes instructions for a specific instruction set; it is made up of one or multiple Cores, including the control unit and the ALU.

"CSP", or cloud service provider means a company offering a cloud-based platform, infrastructure, application, or storage services.

"Current" means an active, valid Subscription Offering. Once a Subscription Offering passes its expiration date, it is "Expired".

"Device" means laptop, desktop, workstation, server or other physical entity which can process and transfer data.

"Edge" means use cases where the data processing occurs on decentralized computing/data-collecting devices away from centralized processing in data centers or cloud environments.

"Education Usage", or **"Educational Use"** has the same meaning as "Academic Use".

"Eligible Public Clouds" are those Public Clouds that are certified by SUSE and are listed at https://www.suse.com/programs/cloud/public/.

"Engine" see IFL or CP.

"**EULA**" means the applicable end user license agreement that accompanies and governs the use of SUSE Software which is available at https://www.suse.com/licensing/eula/.



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"Extension" is a product which requires another product as a foundation to be operational. Examples are: SLES (as foundation) and SLE HA (as Extension), SLES (as foundation) and SMT (Subscription Management Tool as Extension), SLES (as foundation) and SLE HA and Geo SLE HA (as Extension).

"Geographically Clustered" means clusters of Physical Servers which are operated with a network signal latency greater than 15 milliseconds.

"Hardware Architecture" or **"Hardware Platform"** means a family of systems which is able to execute the same executable code or programs.

"High Performance Computing Cluster (HPC Cluster)" is defined as a single entity or Physical System to work on specific tasks by performing compute-intensive or I/O intensive operations on sets of data that are networked and managed to perform compute-intensive workloads or high performance data analysis workloads. The HPC Cluster must split tasks into subtasks which are distributed to one or more HPC Compute Nodes for computation. The HPC Cluster consists of a combination of multiple HPC Compute Nodes and at least one HPC Head Node.

"HPC Head Node" is a Physical Server used exclusively to perform management functions for the HPC Cluster. Typical functions include workload scheduling, input/output management, login nodes, HPC Cluster authentication, performance management, Spark Master and software deployment and patching. An HPC Head Node may not perform any function for systems that are not part of the cluster.

"HPC Compute Nodes" is a Physical Server in a HPC System which is connected to the HPC Head Node and is used solely to provide computational processing capacity for HPC workloads.

"IFL" means an Integrated Facility for Linux ("IFL") on IBM z Systems. An IFL is an IBM mainframe processor capable of running the Linux operating system. An IFL needs to be activated during IML (Initial Microcode Load) and is capable of performing instruction processing. A deactivated IFL cannot execute any instruction. Spare IFLs or deactivated IFLs are not regarded to be activated IFLs. IFL Processors are also available on IBM Power servers with similar characteristics and restrictions as IFL Processors on IBM z Systems.

"Inherited Virtualization" means that an Extension inherits the virtualization type of the Product. The virtualization type is either i) deployment on a Physical Server with no virtualization ("Physical Deployment") on 1-2 Sockets, or 1-2 Virtual Machines on a VMM, or ii) Virtualized Deployment per "1-2 Sockets with Unlimited (number of) Virtual Machines".

"IFLe" means use of an IFL with an elastic pricing Subscription Offering.

"Instance" is a physical or virtual entity, which can be identified as such.

"KVM" is the abbreviation for "Kernel Virtual Machine", a VMM available for different hardware architectures.

"LPAR or DLPAR" means Logical Partition or Dynamic Logical Partition. Different LPAR technologies vary regarding their features. One LPAR context is considered to represent one VM, and any LPAR technology is considered a VMM within the scope of this document.

"Managed Instance" is either an Instance of a third-party product or of a SUSE Product which is managed by SUSE Manager Server.

"MCM" is a Multi-layer Ceramic Module, typically used to achieve high physical integration of electronic components like Processor and cache components.

"MSP", or managed service provider means a company that remotely manages a customer's IT infrastructure and/or end-user systems, typically on a proactive basis and under a subscription model.

"NVMe" means Non Volatile Memory Express.

"Node" is a physical entity capable of receiving and sending data and temporary storage and reading, writing or performing logical operations with the data. A Node typically consists of one or more Processors, memory, and input / output devices connecting to other Nodes or other types of devices. It can also have access to directly attached persistent storage, and special purpose Processors.



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"Operating Environment" can be a Physical Server or Virtualization Host or Virtualization Environment.

"OSD" means Object-based Storage Device and is a disk as seen by the operating system and is written to by SUSE Enterprise Storage. This can be a physical disk or a partition of an NVMe.

"Patch (Update)" means a fix or compilation of fixes released by SUSE to correct operation defects (program bugs) in SUSE Products. A patch can contain one or multiple files to replace or enhance existing executables, programs, applications or documents.

"Physical Deployment" means deployment or use within a physical hardware environment without abstracting software or Virtualization Host or Virtual Machine Monitor (VMM).

"Physical Node" means Physical Server.

"Physical Server" means a physical computer system, whether in a network that is shared by multiple users or on its own, regardless of whether the physical computer system has been partitioned by software. A Physical Server may contain one or multiple CPUs, Cores, or Processors, regardless of production capacity.

"Physical System" means Physical Server.

"PowerVM" is a virtualization technology to provide DLPARs or LPARs for IBM POWER systems, similar to a VMM.

"powerKVM or KVM for POWER" is a virtualization technology based on KVM, to provide VMs for POWER systems, similar to a VMM. PowerKVM has been withdrawn by IBM.

"POWER or IBM Power or OpenPOWER" is the name used for IBM POWER or third party POWER architecture system offerings. Over time, different names have been in place e.g. "POWER8, POWER7, POWER7+", referring to different generations of these systems at different times. POWER processors are also used by third parties which offer systems according to the OpenPOWER specifications.

"Price List" means the Corporate Price List as published periodically by SUSE.

"Private Cloud" means a deployment model where Cloud Services are controlled and used exclusively by You.

"Processor" has the same meaning as CPU.

"Product" is a SUSE product, which does not require another product as a foundation to be operational. Examples are SUSE Linux Enterprise Server and SUSE Linux Enterprise Desktop.

"PTF" is a Problem Temporary Fix: it is an issue to correct one or more customer issues for the time being and is supported until a regular patch is released. Some PTFs might require resolution in the next Service Pack for technical and quality reasons.

"Public Cloud" means a deployment model where Cloud Services are potentially available to any Cloud Service customer and resources thereto are controlled by the Cloud Service provider.

"Raw Storage Capacity" means the total capacity of all storage devices that are allocated to and managed as part of a single Storage Cluster. This measure applies to all physical storage devices configured as part of the cluster. Each cluster is measured and billed independently.

"SCC" is the SUSE Customer Center at https://scc.suse.com.

"SCM" is a single chip module, typically used to achieve high physical integration of electronic components.

"Security Fix" is a corrective fix for a security issue.

"Service Pack" is a periodically released, installable collection of updates, fixes, and code enhancements.

"SES Storage Cluster" is a combination of Physical Servers and Virtual Machines running SUSE Linux Enterprise Server and SUSE Enterprise Storage functionality that is managed as a single entity to deliver storage services.

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"SES Object Storage Daemon or SES OSD Node" is a Physical Server running SUSE Linux Enterprise Server and SUSE Enterprise Storage that provides data storage services by leveraging the SUSE Enterprise Storage Object Storage Daemon (OSD) functionality.

"SES Object Gateway Node" is one Instance on a Physical Server or Virtual Machine running SUSE Linux Enterprise Server and SUSE Enterprise Storage that is used to provide an object storage interface to a SES Storage Cluster.

"SES Monitor or SES MON Node" is one Instance on a Physical Server or Virtual Machine running both SUSE Linux Enterprise Server and SUSE Enterprise Storage and that monitors (Ceph Monitor) and manages (Ceph Manager) SES OSD Nodes within a SES Storage Cluster.

"SES Management Node" is one Instance on a Physical Server or Virtual Machine running SUSE Linux Enterprise Server, SUSE openATTIC and SUSE DeepSea that is used to provide storage management services for the SES Storage Cluster.

"SES Metadata Server Node" is one Instance on a Physical Server or Virtual Machine running SUSE Linux Enterprise Server and SUSE Enterprise Storage that is used to manage the file system namespace and provide a file system interface to a SES Storage Cluster.

"SES iSCSI Gateway Node" is one Instance on a Physical Server or Virtual Machine running SUSE Linux Enterprise Server and SUSE Enterprise Storage that is used to provide an iSCSI interface to a SES Storage Cluster.

"SES NFS Gateway Node" is one Instance on a Physical Server or Virtual Machine running SUSE Linux Enterprise Server, an optional instance of SUSE Linux Enterprise High Availability Extension and SUSE Enterprise Storage that is used to provide an NFS interface to a SES Storage Cluster.

"SES CIFS/Samba Gateway Node" is one Instance on a Physical Server or Virtual Machine running SUSE Linux Enterprise Server, an optional instance of SUSE Linux Enterprise High Availability Extension and SUSE Enterprise Storage that is used to provide a CIFS interface to a SES Storage Cluster.

"SES Infrastructure Node" is a Physical Server or Virtual Machine running an Instance of SES Management Node, or SES MON Node, or SES Metadata Server Node, or SES Object Gateway Node, or SES iSCSI Gateway Node, or SES NFS Gateway Node or SES CIFS/Samba Gateway Node.

"SES Node" is either a SES OSD Node or a SES Infrastructure Node.

"SES Expansion Node" is either a SES OSD Node or a SES Infrastructure Node in the context of a SES Expansion Subscription Offering

"SMT (Simultaneous Multi-Threading)" specifies the capability of a Processor to execute multiple instruction streams concurrently.

"Socket" is a location on the motherboard or other similar computer circuitry where a CPU has been physically installed on a System (populated). For the purposes of this document, the term Socket is used for Processor Cards, MCMs, SCMs or DCMs for POWER systems.

"Socket Pair" is up to two Sockets on a Physical Node.

"Socket Pair Equivalent" is concept used with IBM Power servers to compute a synthetic Socket Pair count by dividing the number of Physical CPUs assigned to a SUSE Product divided by the number of physical cores per Socket on that Physical Node.

"Software" means any SUSE or SUSE Affiliate branded software product that is included in a Subscription Offering. **"Stackable"** means that multiple Subscriptions Offerings may be aggregated or "stacked" to match or exceed the number of Sockets in a Physical Server. For example, a Physical Server with four Sockets needs two Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines". Odd numbers of Sockets must be rounded up: e.g., three Sockets in a Physical Server scenario must carry two stacked Subscription Offerings for "1-2 Sockets or 1-2 Virtual Machines."

"Storage Cluster" is a group of servers running SUSE Linux Enterprise Server and SUSE Storage components that are managed as a single entity to deliver storage services.



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"Sub-Capacity" is a concept used with IBM Power that allows for Subscription Offerings for SUSE Products to be based on less than the full capacity of activated Processors on the Physical Node for Power servers with four or more Sockets when PowerVM is used to limit the Processor capacity available to a SUSE Product.

"**Subscription Offering**" means a SUSE offering You acquire for a SUSE Product (e.g., subscription services available with SUSE Linux Enterprise Server ("**SLES**") products, whether designated as Basic, Standard, or Priority Subscription) and may include Subscriptions for non-SUSE products.

"**SUSE Product**" is a software product that you acquire directly or indirectly from SUSE for which Subscription Offerings are made available.

"Swift" is the OpenStack Object Store.

"Rancher Node" means any Instance that is running Kubernetes workloads that are managed by a SUSE Rancher Management Server.

"**Upgrade**" means any new version of SUSE Products which bears the same product name, including version changes evidenced by a number immediately to either the left or right of the decimal (e.g. SUSE Linux Enterprise Server 9.x to 10.x). If a question arises as to whether a product offering is an Upgrade or a new product, SUSE's opinion will prevail, provided that SUSE treats the product offering the same for its end users generally.

"User" is a user or entity accessing the system and establishing a connection to the system, or an entry in a directory, regardless of which kind, e.g., a person, an object such as a company name.

"vCPU" - virtual central processing unit. One or more vCPUs are assigned to every Virtual Machine (VM) within a cloud environment. Each vCPU is seen as a single physical CPU core by the VM's operating system.

"Virtual Core" or "vCore" is a logical CPU exposed to the operating system by the Physical Server or Virtual Machine. Enabling or disabling technologies like Intel Hyper-Threading or the AMD SMT extensions can influence the number of Virtual Cores exposed to the operating system.

"Virtualized Deployment" means deployment or use of the product involving a VMM.

"Virtual Device" is a virtualized resource in a Virtual Machine context, e.g. virtualized processor, virtualized block or network device.

"Virtualization Environment" means a group of Virtualization Hosts on which You can deploy Virtual Machines as if they were running on a single Virtualization Host.

"Virtualization Host" is a single Physical Server which executes one or more Virtual Machines by a VMM.

"Virtual Image" see Virtual Instance.

"Virtual Instance" is one entity of an operating system, workload or application, which is executed in a virtual context created by a VMM.

"Virtual Machine" or **"VM"** or **"Virtual Guest"** means a virtualized context that can execute e.g. one operating system, workload, application, or multiples of such, like a Physical System. Some VMs can be migrated from one VMM context to another, residing on the same Physical System, or on different Physical Systems, or within logical partitions. Some VMMs allow nesting of VMMs (multiple layers of virtualization with the same or different VMMs).

"Virtual Machine Monitor (VMM) or Hypervisor" describes a software and/or hardware technology, which allows creation of one or multiple virtualized contexts for sharing and/or isolating resources of the underlying hardware. A VMM can, by way of example manage and expose these resources to an operating system, workload environment or application. VMMs include without limitation. KVM, Xen, Microsoft Hyper-V, VMware vSphere Hypervisor, DLPAR, LPAR, and z/VM.

"Virtual System" is a virtualized context which is able to abstract a Physical System, like a Virtual Machine. See VM.

"Virtualization Technology" means software and/or hardware technology used to implement e.g. a Virtual Machine Monitor (VMM) and supporting functions such as to manage the lifecycle of a Virtual Machine.



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"**VLA**" or "**Volume Licensing Agreement**" means the terms available at https://www.suse.com/licensing/vla_documents/.

"x86, x86-64, ia64, ppc64, ppc64le, s390, s390x and AArch64" are the Linux instruction set architecture abbreviations for different type of Physical Systems and Processors instruction sets. By example: x86 for Intel and AMD 32-bit x86 Processors, x86-64 for Intel 64 and AMD64 64-bit Processors, ia64 for Intel Itanium Processor Family, ppc64 for IBM POWER big endian Processor instruction set, ppc64le for POWER little endian Processor instruction set, s390x for IBM z Systems z/Architecture type Processors, and AArch64 for 64-bit Arm architecture Processors.

"Xen" is a Virtual Machine Monitor.

"z Systems or IBM z Systems" is the name used by IBM for mainframe type systems. Over time, different names have been used e.g. "IBM Z, IBM LinuxONE", "IBM z Systems, "IBM System z", "IBM zEnterprise", "IBM zSeries", "IBM mainframe", "IBM S/390", referring to different generations of these systems at different times.



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